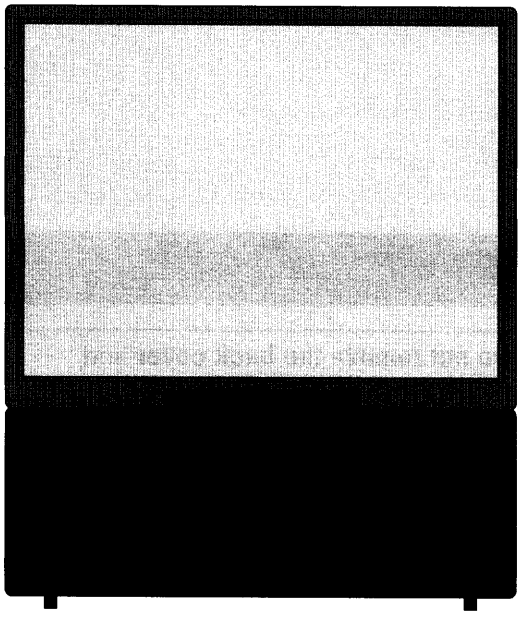
97

TOSHIBA

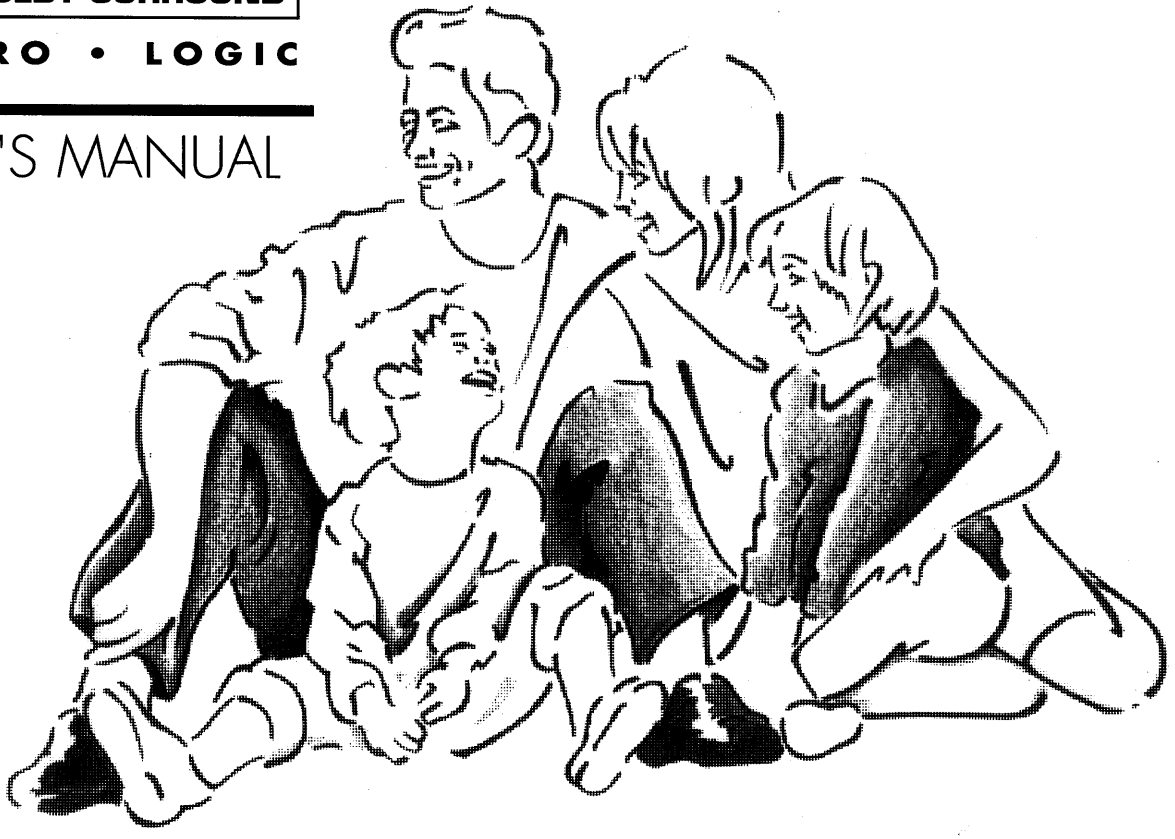


48PJ6DB
55PJ6DB

Nicam Digital Stereo Colour Television
with Fastext

* DOLBY SURROUND PRO • LOGIC

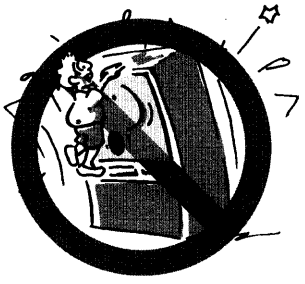
OWNER'S MANUAL



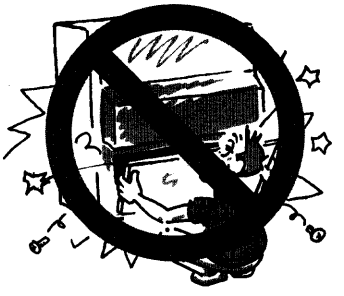
Introduction

For safety, observe the following without fail:

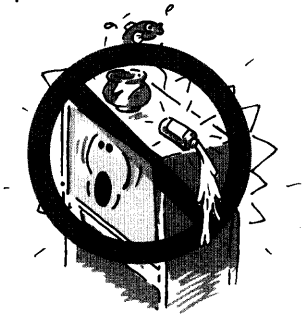
Do not Stand or Climb on the TV
The TV is dangerous if broken or if it has fallen over. Be careful when children are present.



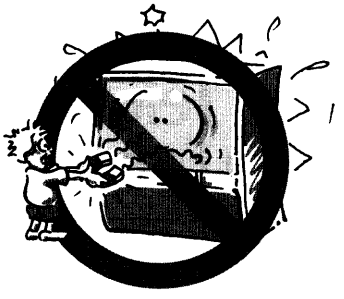
Do not remove the back cover and never remodel the cabinet or components. Only allow qualified personnel to check and adjust your set.



Do not place containers with liquids, such as drinks, cosmetics, flowers etc. on the TV. If water or any foreign material gets into the TV, remove the power cable immediately and contact your Toshiba dealer.

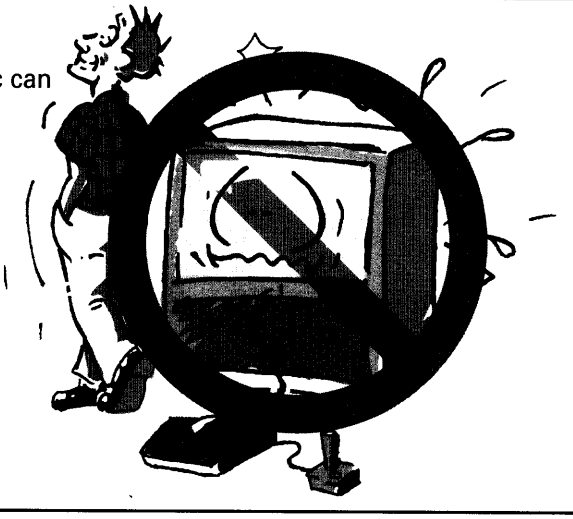


Keep magnets, toys with magnets, electric clocks, speakers etc., away from the TV.



This is not a standard TV:

NEVER: leave a stationary image on the tv screen,
Stationary patterns generated by Teletext, computer displays, etc can become permanently ingrained. If you use your TOSHIBA television to display still images, it is always advisable to reduce **BOTH** the brightness and contrast settings. **Never leave a computer display or video game unattended** as any resulting damage which might be caused is not protected by your warranty, as it is the result of misuse.



Never: connect speakers with the television switched on,
Always turn off the TV before connecting other equipment and never move the INT/EXT speaker switch with the television switched on.

Introduction

Optimum reception of colour and text requires a good signal and will generally mean that a loft or outdoor aerial must be used. The exact type and siting will depend upon your particular area and your local Toshiba dealer will be best to advise.

Contents:

GETTING STARTED

Introduction (For safety)	Page	2
Introduction (Contents)	Page	3
Introduction (To install the TV)	Page	4
Introduction (Position and best viewing)	Page	5
Installation (Electrical installation, Connecting the aerial, Connecting the Surround Speakers, Connecting the External Left and Right Speakers)	Pages	6/7
Preparing the remote control (The remote control, Batteries for the remote control, Effective range for the remote control)	Page	8
Your remote control	Page	9
Turning the TV on and off (Switching the power on, Switching on from standby)	Page	10
Menu displays (Selecting and adjusting Menu functions using the remote control, List of Main menu displays, List of Feature menu displays)	Pages	11-13
Tuning-in (Aligning the colours, Selecting the Language, Selecting the System, Preparing to tune, Auto tune, Manual tune, Tuning to a video via RF leads, Manual fine tuning)	Pages	14-20

BASIC OPERATION

Watching TV programmes (Volume, Changing programme positions using the remote control)	Page	21
Picture and sound controls (Sound mute, Keeping the on-screen displays)	Page	22
Picture adjustment	Page	23
Sound adjustment	Page	24

SPECIAL SOUND FEATURES

Stereo or bilingual broadcasts	Page	25
Surround effect selection	Page	26
Dolby Pro Logic Surround (Dolby Pro Logic: Normal, Dolby Pro Logic: Phantom, Dolby 3 Stereo)	Page	27
Digital Surround Processor (Surround Sound: Hall, Theatre, Disco, Stadium, Pseudo, Off)	Pages	28-29
Dolby Pro Logic Surround (Selecting Dolby Pro Logic Surround and Dolby 3 Stereo)	Page	30
Dolby Surround level settings (Dolby Pro Logic TEST mode)	Page	31
Digital Surround level settings (Digital Surround Test mode)	Page	32

ADDITIONAL FEATURES

Colour system selection, Programme skip	Page	33
Timer, Horizontal shift	Page	34
Aspect	Page	35
Additional menu items (AV connections, Noise Reduction and Blue Screen)	Page	36
Manual Input Selection, Time display	Page	37

VIEWING TELETEXT

Teletext (Character set for Teletext, Teletext mode)	Page	38
Teletext (Using Teletext)	Page	39
Teletext buttons on the remote control	Page	40

CONNECTING OTHER EQUIPMENT

Front and Back connections	Page	41
Connecting a standard video recorder via a scart lead	Page	42
Connecting a Super VHS video recorder (via a S-video jack lead, via a Scart lead)	Page	43
Connecting a camcorder to the TV front	Page	44
Copying from one video recorder to another	Page	45

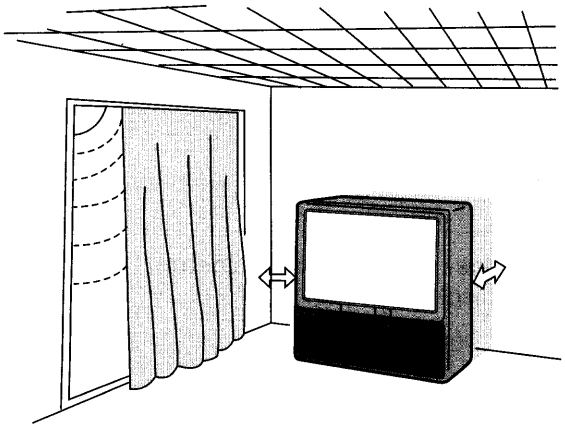
OTHER

For your guidance (Safety tips)	Page	46
For your guidance (Simple problem solving)	Page	47
Specifications & Accessories, Optional Extras	Page	48

Introduction

To install the TV:

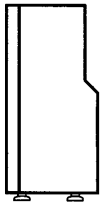
Where to install
Locate the television away from direct sunlight and strong lights. Soft, indirect lighting is recommended for comfortable viewing. Place the TV directly on the floor or a sturdy platform. The mounting surface should be flat and steady. If you install the TV onto a soft floor covering, make sure that the covering will not be damaged by the weight of the TV.



Use curtains or blinds to prevent direct sunlight falling on the screen.

Cover shiny surfaces (floor and walls) with non-reflective materials such as carpets, wall paper, rugs etc.

Precautions when moving and installing the Unit
To facilitate the movement of this TV there are casters at each corner. Always take great care when moving this TV as it could be easy to scratch polished floor surfaces or damage floor coverings. Having decided on a location, we strongly recommend using the castor trays (provided) to minimise any damage to the floor covering.



Air Circulation
Leave at least 10 cm clearance around the television to allow adequate ventilation. This will prevent the TV from overheating and consequential possible damage to the TV. Dusty places should also be avoided.

Heat Damage
Damage may occur if you leave the TV in direct sunlight or near a heater.
Avoid places subject to extremely high temperatures or humidity, or locations where the temperature is likely to fall below 5C (41F).

Moisture/Condensation
If the room temperature suddenly rises (or if the TV is moved from a cool room to a hot room), you may notice the colour of the picture fades or becomes distorted, this is due to condensation on the lenses. In such instances, simply wait a while (with the TV turned on) and the condensation will evaporate.

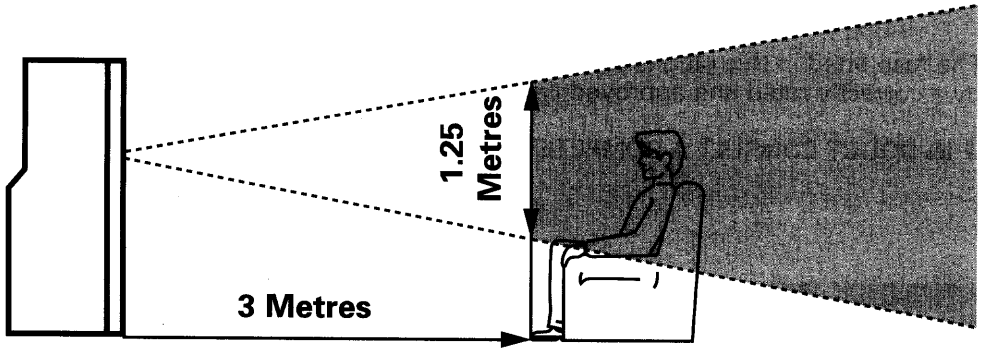
Introduction

Position and best viewing:

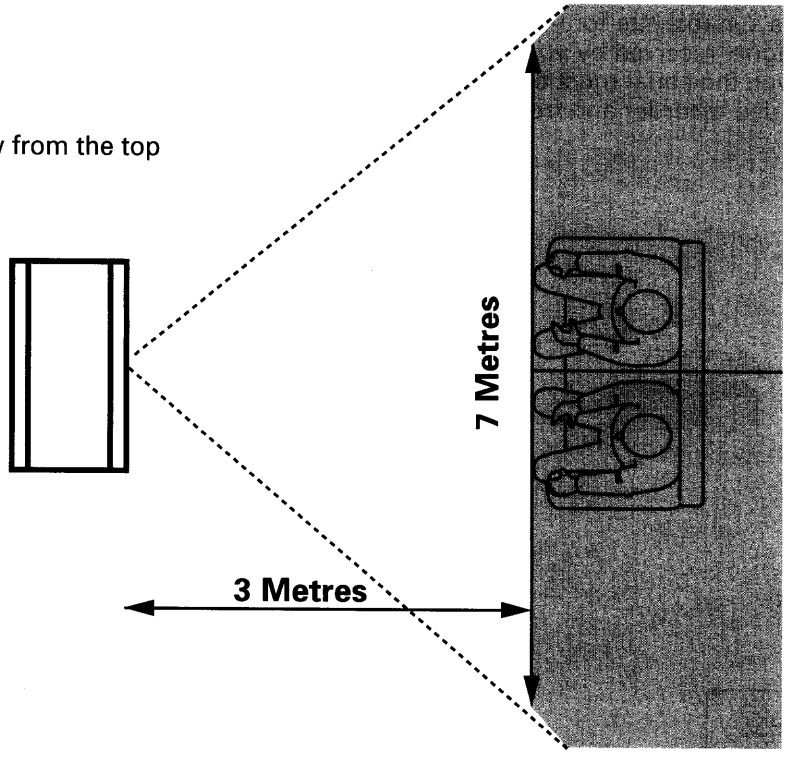
Best Viewing

Sit approximately 3 to 8 metres away from the screen. Do not stand close to the TV when making adjustments to the colour, convergence etc.

View from the side



View from the top



Sitting too far to the left or right of the screen will cause the picture to appear dull (as will direct sunlight/ internal lights etc.). It is advisable to turn the TV off to check for reflections on the screen, then remove the source of any such reflections.

Installation

The following describes the initial set-up procedure in order to operate the features of your TV.

Electrical installation:

The mains supply required for this equipment is 220v to 240v AC 50Hz. Never connect to a DC supply or any other power source.

Mains Plug

DO NOT cut off the fused mains plug from this equipment, this incorporates a special Radio Interference Filter, the removal of which will impair its performance.

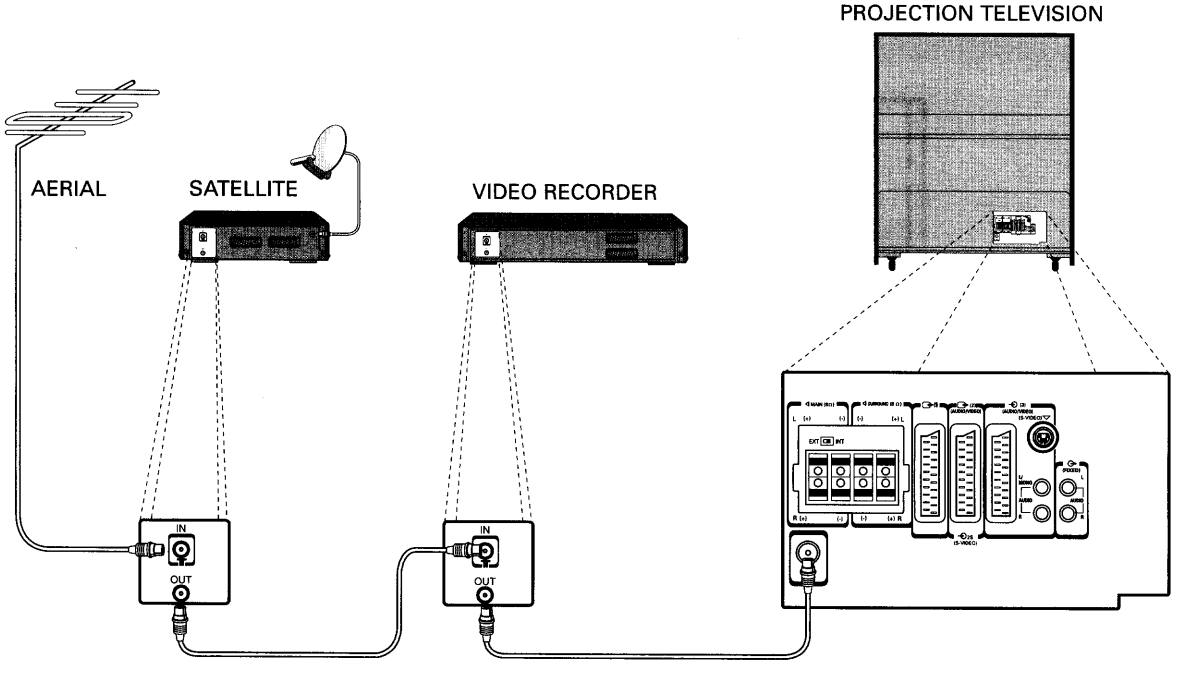
The fuse fitted in this plug is 5A. and is approved by ASTA or BSI to BSI1362. It should only be replaced by a correctly rated and approved type and the fuse cover must be re-fitted.

IF IN DOUBT CONSULT A COMPETENT ELECTRICIAN

Connecting the aerial:

Optimum reception, of colour and text, requires a good broadcast signal. This generally means that an outdoor aerial must be used. The exact type and siting will depend upon your particular area and your local Toshiba dealer will be best to advise.

Having selected a suitable site for your TV you must now connect the Aerial lead (R.F. lead). This cable will deliver the signal received by your aerial, direct to your TV. If you intend to connect a video recorder or satellite receiver, the aerial must be connected first to the satellite receiver, then from the satellite receiver to the video recorder and from the video recorder to the TV.

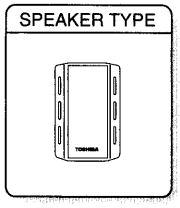


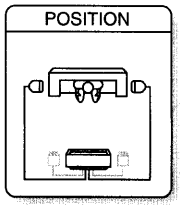
Having connected the aerial you are now ready to connect the surround speakers, and the external left and right speakers.

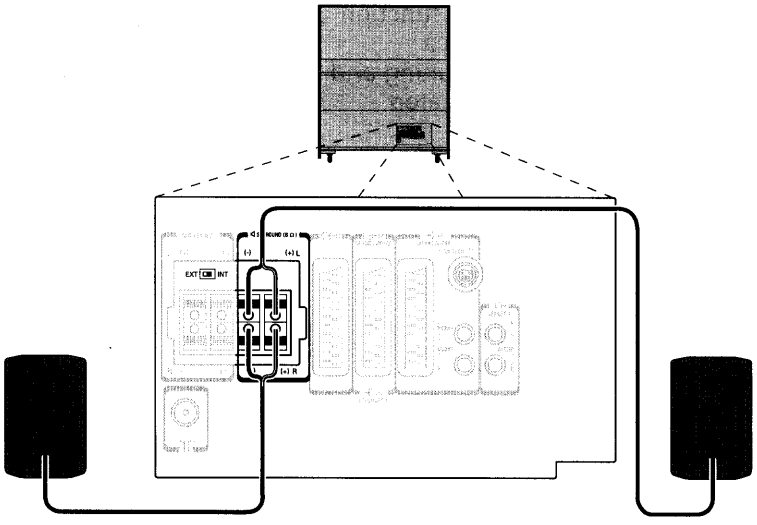
Installation

It is essential that the TV is switched off before you connect any external speakers (Surround and Front Left and Right). Failure to do so may damage your speakers,

Connecting the Surround Speakers:



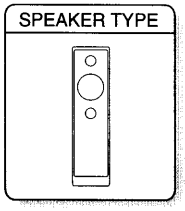


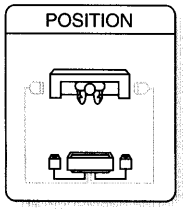


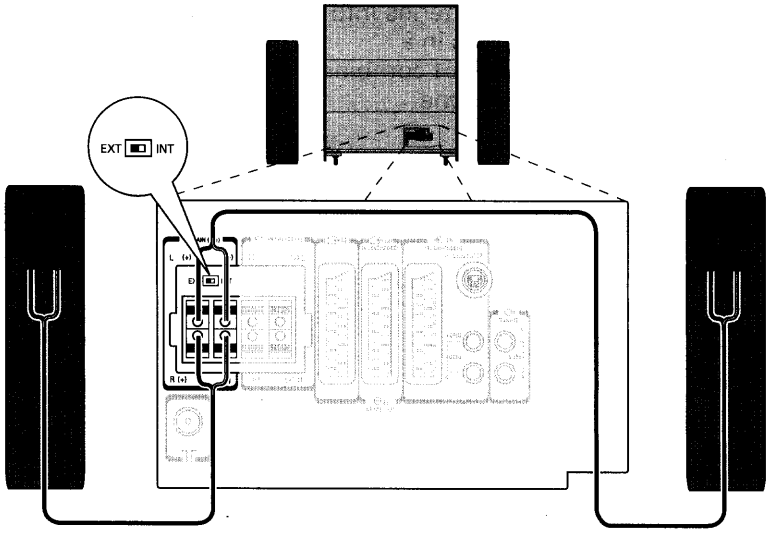
In order to enjoy the sensations of Surround Sound TV it is necessary to connect the 2 surround speakers. These speakers and cables are included with the TV and should be sited in line with the normal viewing position.

To connect the Surround Speakers simply press the connector and insert the cable. Always make sure that the lead with the white stripe is connected to the RED terminal and the black lead is connected to the BLACK terminal.

Connecting the External Left and Right Speakers:







To improve the positioning of the centre channel, ie dialogue, we recommend that external speakers are used. These speakers should be positioned directly beside the TV and will deliver the left and right sound channels. Simply press the connector as shown and insert the cable. Always make sure that the lead with the white stripe (or raised edge) is connected to the RED terminal and the other (smooth) lead is connected to the BLACK terminal.

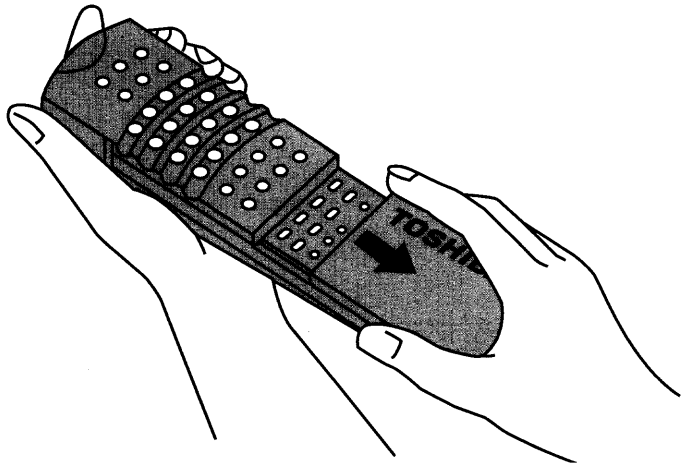
In order that the centre speaker is used, you must now set the switch to EXT as shown.

Preparing the remote control

The remote control:

In addition to the standard set of function buttons, your remote control has a concealed portion in which the tuning and additional feature buttons are located.

Carefully slide back the lower portion of the remote control to reveal the concealed buttons.

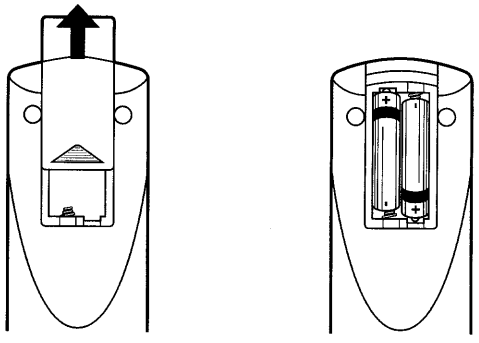


Batteries for the remote control:

Carefully slide the cover upwards to reveal the battery compartment of the remote control (located on the rear). When fitting new batteries take care to observe the correct polarities.

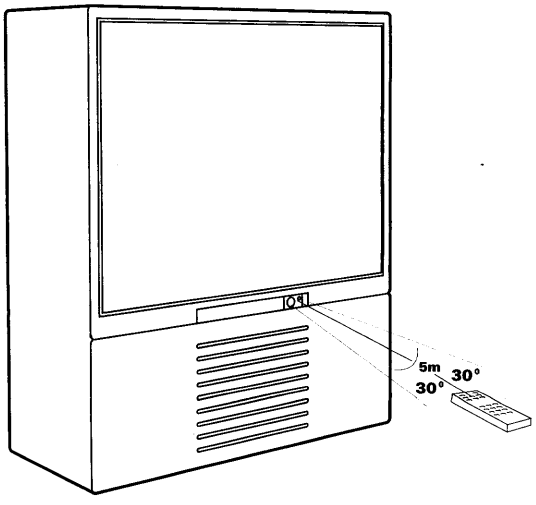
All Toshiba batteries are Cadmium and Mercury free.
Suitable battery types are: R6 or AA.

Caution: Do not throw your batteries into a fire. Dispose of your batteries in a designated disposal area. **Do not** combine a used old battery with a new one. **Do not** mix battery types.



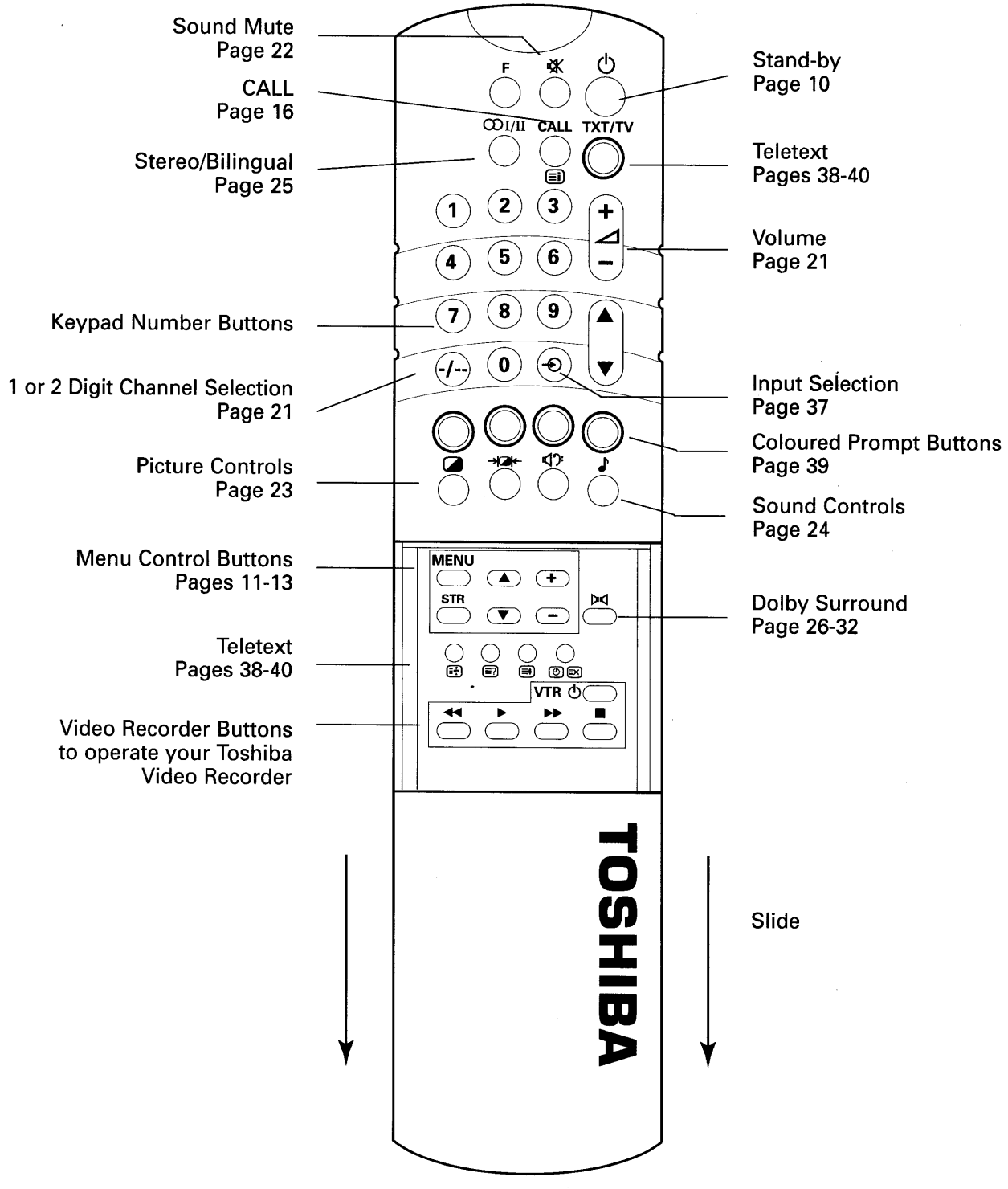
Effective range for the remote control:

For optimum performance the remote control will operate within a distance of 5 metres and up to 30° from the central position.



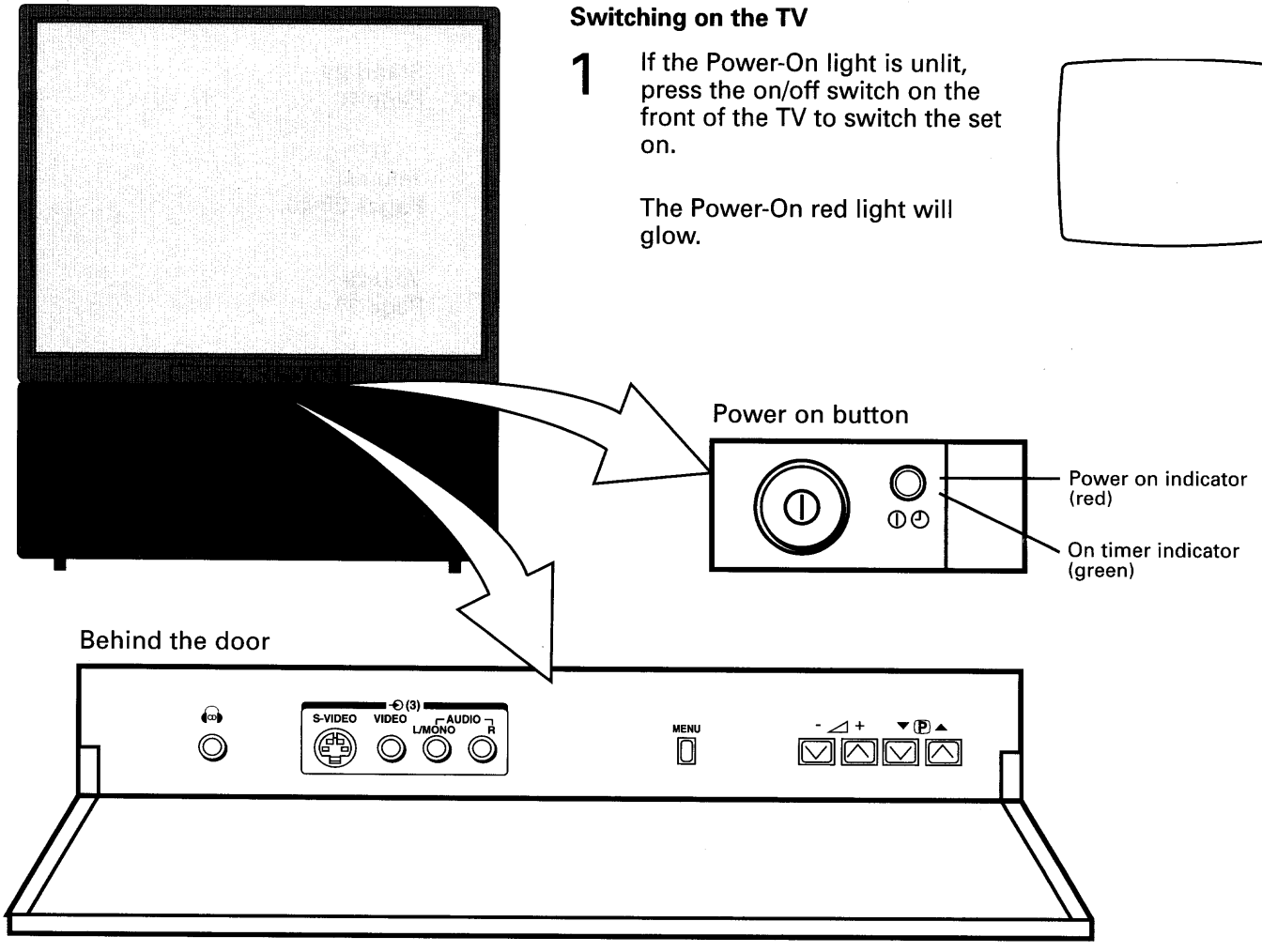
Your remote control

The illustration below is designed to show the areas of the remote control. Individual buttons are described in the text.



Turning the TV on and off

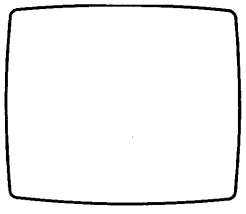
Switching the power on:



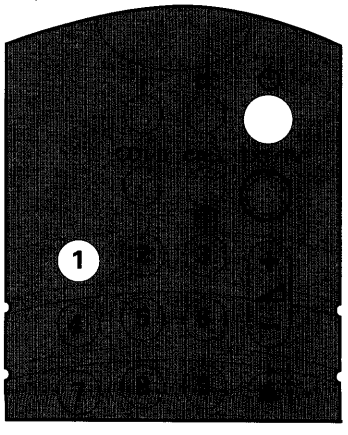
Switching on the TV

1 If the Power-On light is unlit, press the on/off switch on the front of the TV to switch the set on.

The Power-On red light will glow.

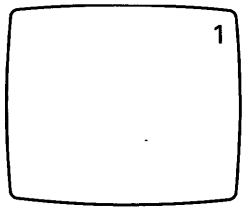


Switching on from standby:



Switching on from standby

1 Press button 1 on the remote control to turn the TV on from standby.



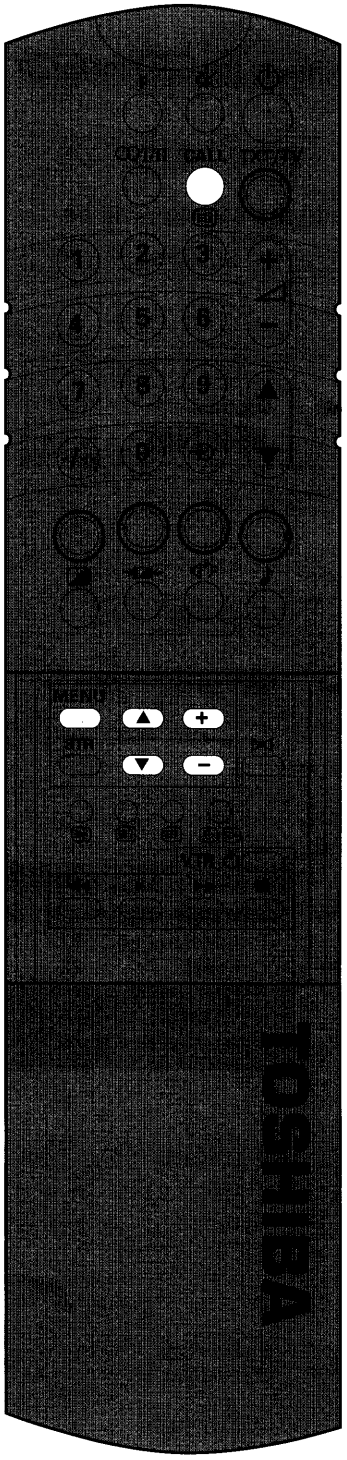
Standby Button ⏻:
This allows you to put the set into standby mode when leaving the TV unattended for short periods of time. To return to TV mode press the ⏻ button, or any of the numbered buttons on the remote control.

Menu displays

Menu displays will remain on screen for approximately 15 seconds. If a display disappears simply press the MENU button to bring back the Main menu screen display.

To cancel any display press the CALL button.

Selecting and adjusting Menu functions using the remote control:

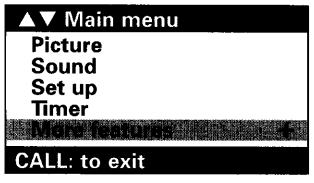


Selecting and adjusting Menu functions

1 Press the MENU button to access the **Main menu** display.

2 Press the ▲ (or ▼) buttons to move the *highlight* bar up (or down) the menu.

3 Press the + button to *select* or adjust the settings.



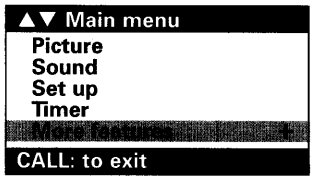
For example:

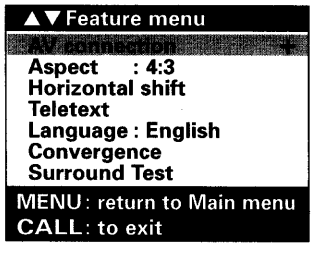
1 Press the MENU button to access the **Main menu** display.

2 Press the ▲ (or ▼) button to *highlight* More features.

3 Press the + button to *select* the **Feature menu**.

By pressing the ▲ (or ▼) button the *highlight* bar can then be moved to the next item required and the + button to *select* the next display or the + (or −) button to *adjust* the settings.





Menu displays

Menu displays will remain on screen for approximately 15 seconds. If a display disappears simply press the MENU button to bring back the Main menu screen display.

To cancel any display press the CALL button.

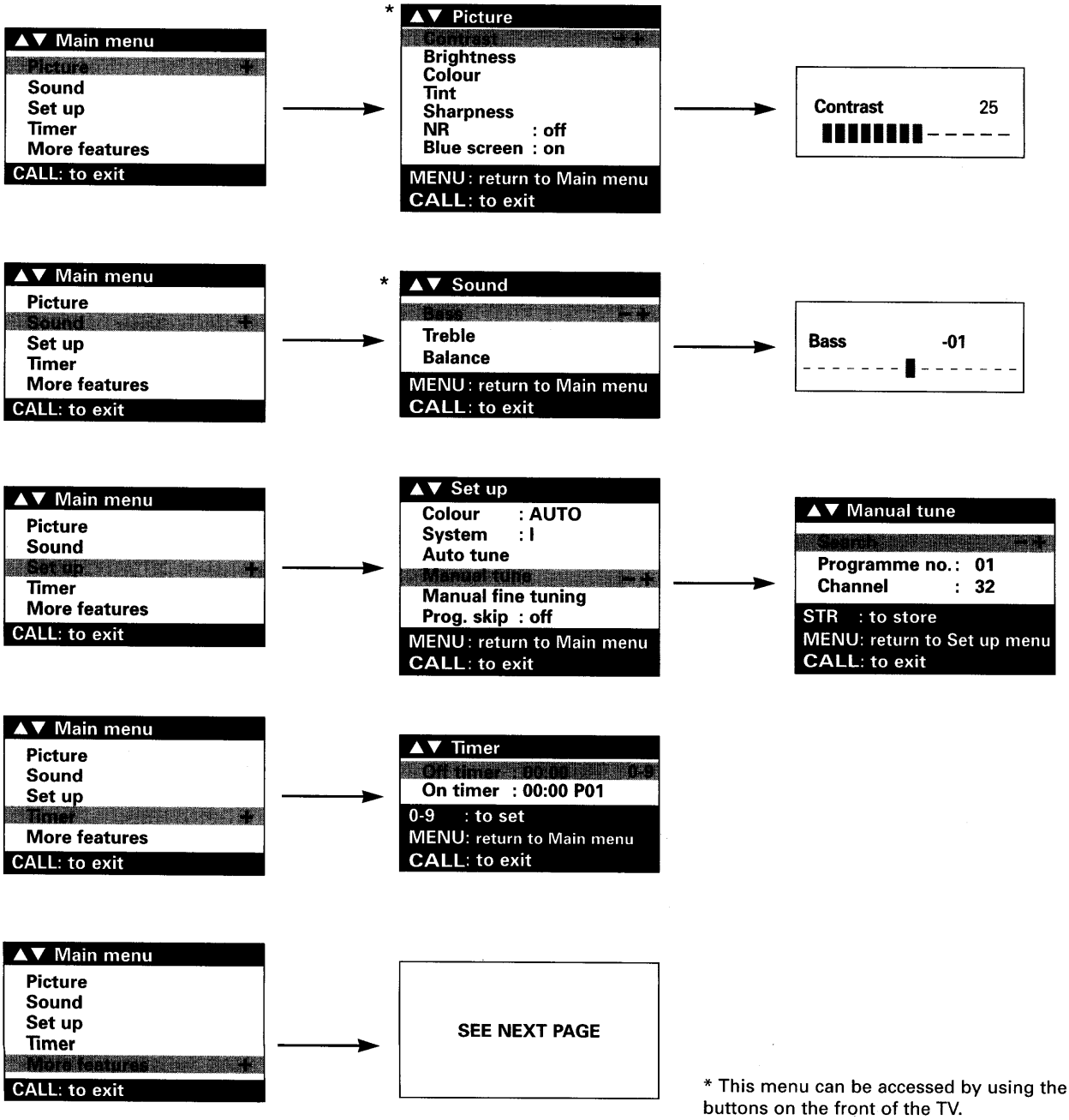
List of Main Menu Displays:

All adjustments and settings are made using a series of menu displays. Listed below are a selection of the available menus.

The menu title appears in the top bar. To move up (or down) the menu lists, press the ▲ (or ▼) button.

To select a menu press the + (or −) button.

To adjust a level or setting press the + (or −) button. Changes made to the settings will be displayed.

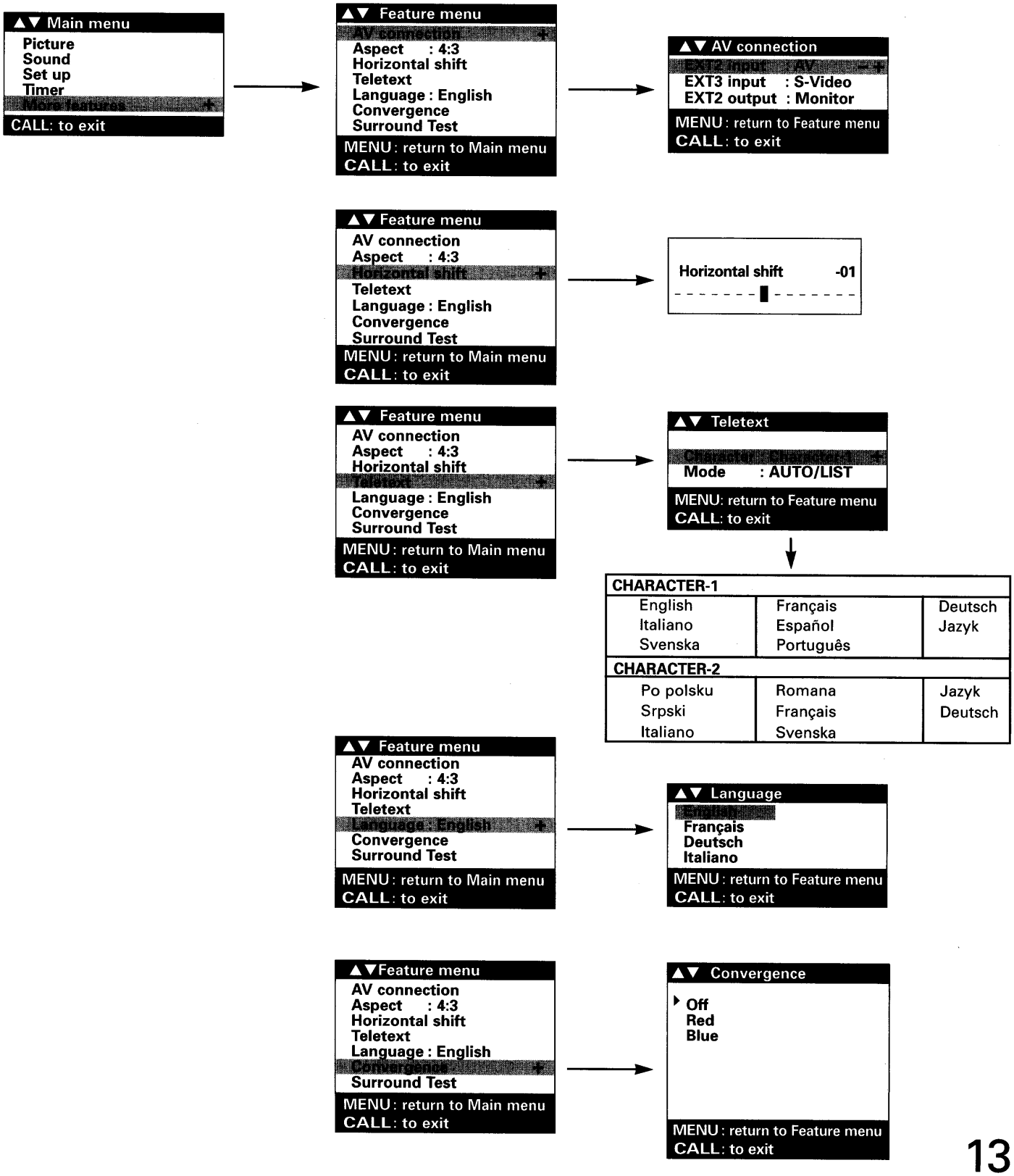


* This menu can be accessed by using the buttons on the front of the TV.

Menu displays

Press the MENU button to access the **Main menu** display.
Press the ▲ (or ▼) button to move the *highlight* bar up (or down) the menu.
Press the + button to *select* or adjust the settings.

List of Feature Menu Displays:

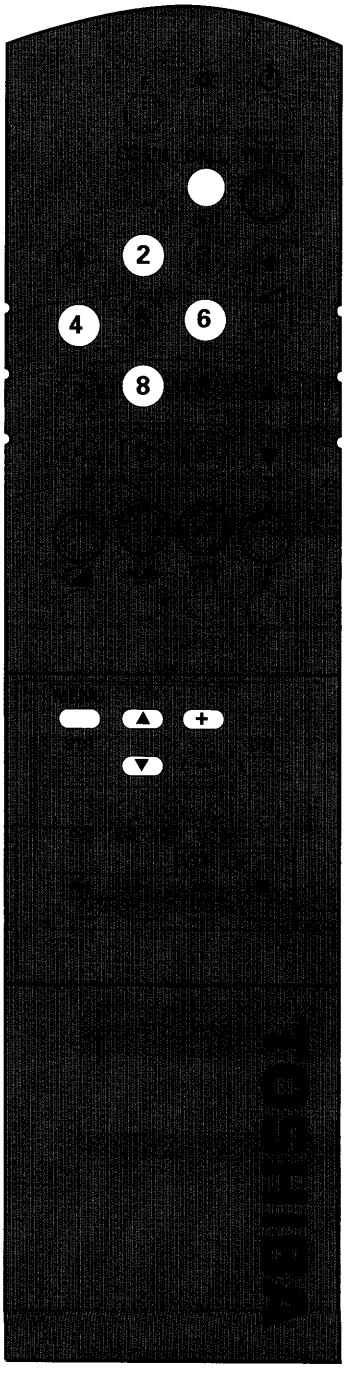


Tuning-in

On this television the red, green and blue images are projected separately onto the screen where they converge to form a full colour picture. You can see a clear picture only when they converge correctly.

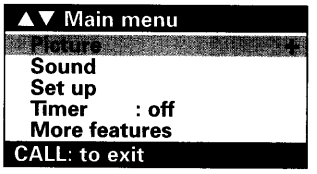
Aligning the colours:

The colour convergence is factory set and should need little or no adjustment. However, convergence may drift over time or if you move the TV.



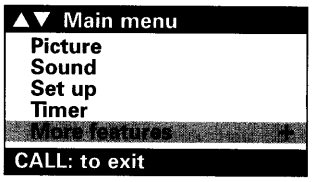
To check and align the colours

1 Press the MENU button to *select* the **Main menu** display.



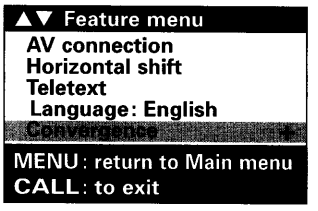
2 Press the ▲ (or ▼) button repeatedly to *highlight* More features.

Press the + button *select* the **Feature menu**.

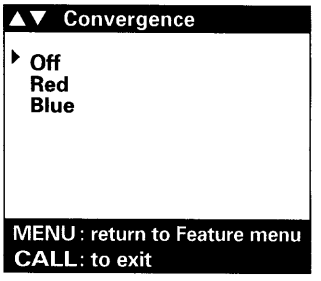


3 Press the ▲ (or ▼) button repeatedly to *highlight* Convergence.

Press the + button to *select* the **Convergence** display.

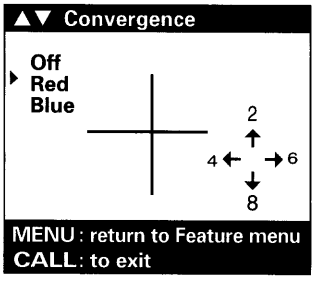


4 To check the convergence, press the ▼ button and the marker will highlight the word 'Red'. If the alignment is correct you will see a white cross on the screen accompanied by a red diagram in the lower right side of the screen .



If you can see separate colours you will have to align the colours.

To adjust the RED or the BLUE (the GREEN is not adjustable) press the ▲ (or ▼) button repeatedly to *select* the **colour** required.

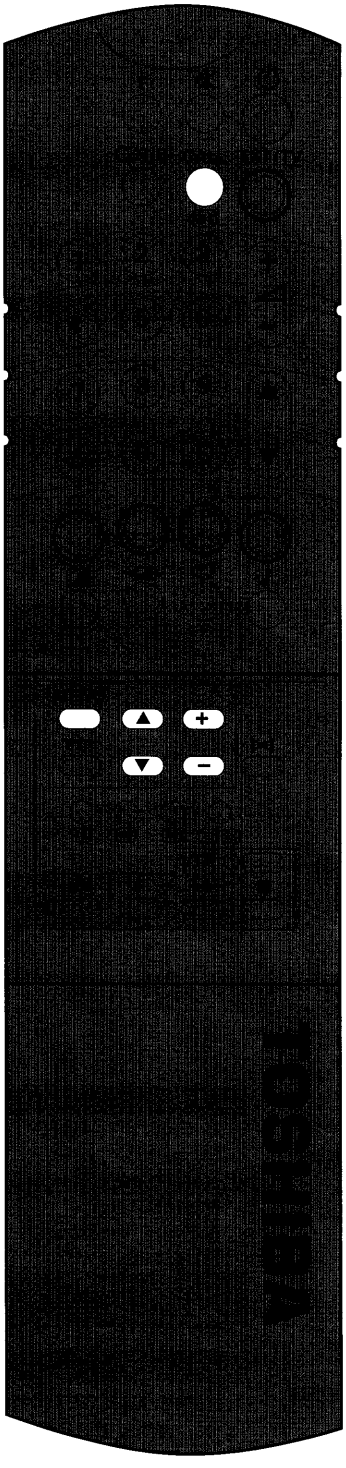


Using the numbered buttons on the remote control press 2 (up), to adjust upwards, press 8 (down) to adjust downwards, press 4 (left) to adjust to the left or press 6 (right) to adjust to the right until only a white cross is showing.

Tuning-in

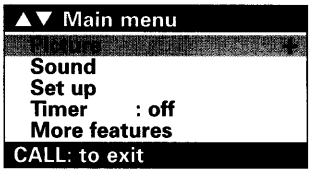
All on screen displays can be viewed in English, French German or Italian. To change the language displayed, follow the procedure set out below.

Selecting the Language:

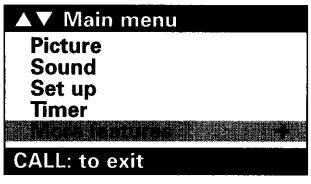


To change the language

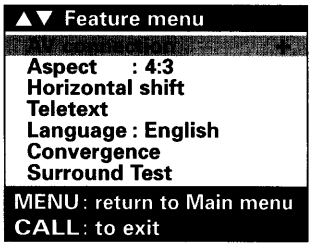
1 Press the MENU button to *select* the **Main menu** display.



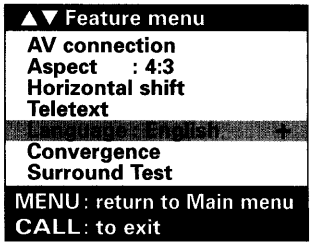
2 Press the ▲ (or ▼) button repeatedly to *highlight* More features.



3 Press the + button to *select* the **Feature menu**.



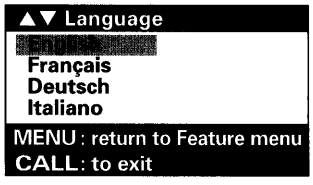
4 Press the ▲ (or ▼) button repeatedly to *highlight* Language.



5 Press the + button to *select* the **Language** display.

Press the ▲ (or ▼) button repeatedly to *select* the **Language** required.

Press the MENU button repeatedly to return to the Main menu.

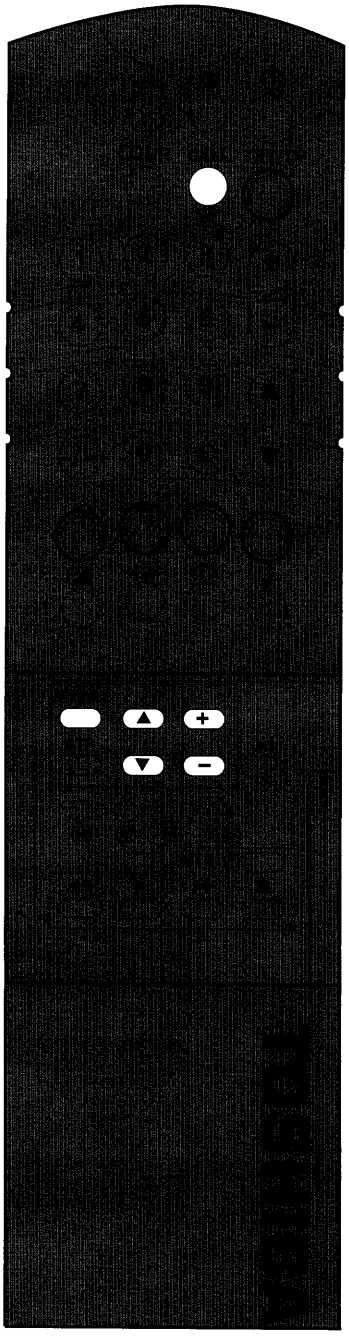


Tuning-in

Menu displays will remain on screen for approximately 15 seconds. If a display disappears simply press the MENU button to bring back the Main menu screen display.

To cancel any display press the CALL button.

Selecting the system, preparing to tune:

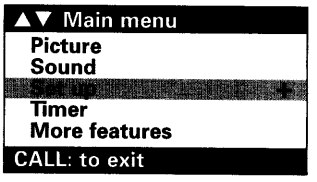


Note for engineers: This TV has direct channel entry for use if the channel numbers are known.
Select the screen in step 2 on page 19 highlight **Channel**, then enter the appropriate channel number using the remote control.
To memorise follow step 5 on page 19.

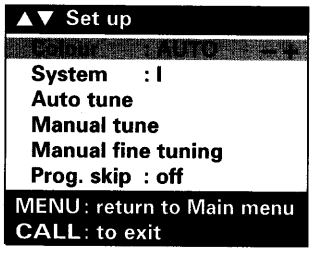
Note: The satellite receiver must be switched on and tuned to Sky News. This will enable your television to allocate the necessary programme positions. Ensure the video recorder is plugged in and set to standby.

1 With the **Main menu** display showing.

Press the ▲ (or ▼) button to *highlight* Set up.



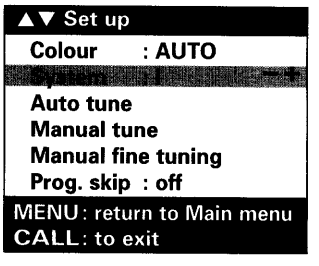
2 Press the + button to *select* the **Set up** display.



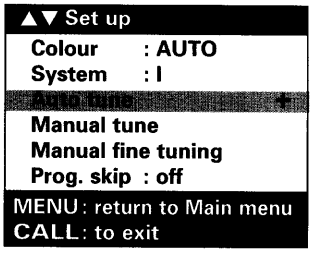
3 With the **Set up** menu showing, press the ▲ (or ▼) button to *highlight* System.

Press the + (or −) button to *select* the required system. ie B/G, I, D/K and FR1/FR2.

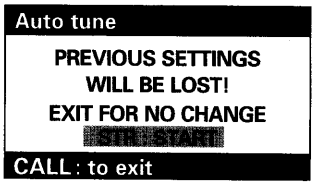
I for United Kingdom, D/K for Eastern Europe, FR1/FR2 for France and B/G for Continental Europe.



4 Press the ▲ (or ▼) button to *highlight* Auto tune.



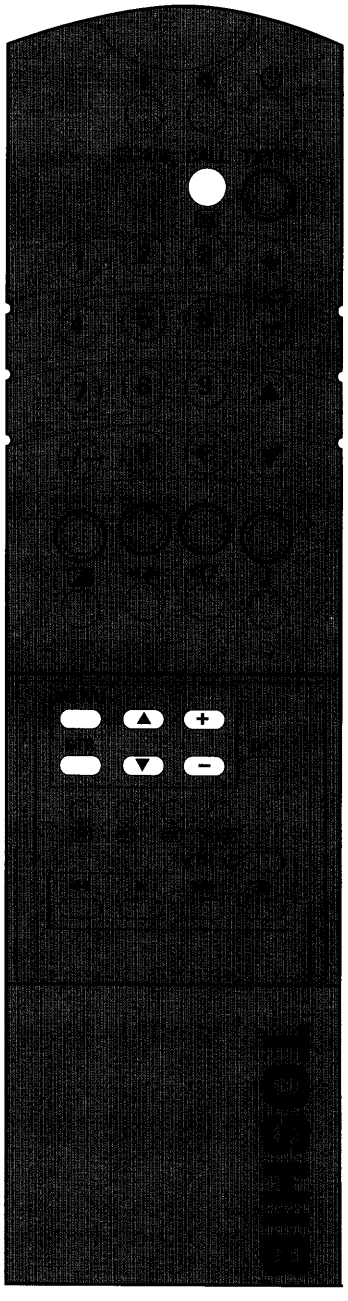
5 Press the + button to *select* the **Auto tune** display.



Tuning-in

Auto tune has been specifically designed to work with the Pal I broadcast system, as used in the United Kingdom. If you wish to tune to other broadcast systems, please refer to the Manual tune section on page 19 of this book. Menu displays will remain on screen for approximately 15 seconds.

Auto tune:



RECOMMENDED PROGRAMME POSITIONS FOR AUTO TUNE

DISPLAY	PROG POSITION	DESCRIPTION
BBC1	POS 1	BBC1
BBC2	POS 2	BBC2
ITV1	POS 3	ITV1
CH4	POS 4	CHANNEL 4
CH5	POS 5	CHANNEL 5
SAT	POS 6	SATELLITE

DO NOT PRESS 🔇 OR ANY OTHER BUTTONS WHILST YOU ARE TUNING

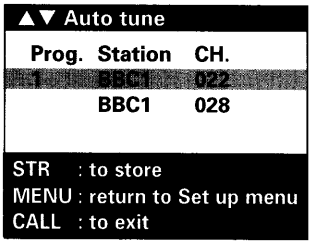
1 Press the STR button to start the automatic search.

Allow the television to complete the search.

DO NOT PRESS ANY BUTTONS WHILST THE AUTOMATIC SEARCH IS IN PROGRESS. If you make a mistake simply repeat steps 1 and 2 to start again from the beginning. The channel number will change as the TV searches through the band (21-69). Each station will be displayed along with the station identifier.

(This takes approximately 3 minutes)

2 When the search is complete the television will display a list of all the BBC1 signals available. If there is a choice, press the ▲/▼ buttons to scroll through and view the channels.

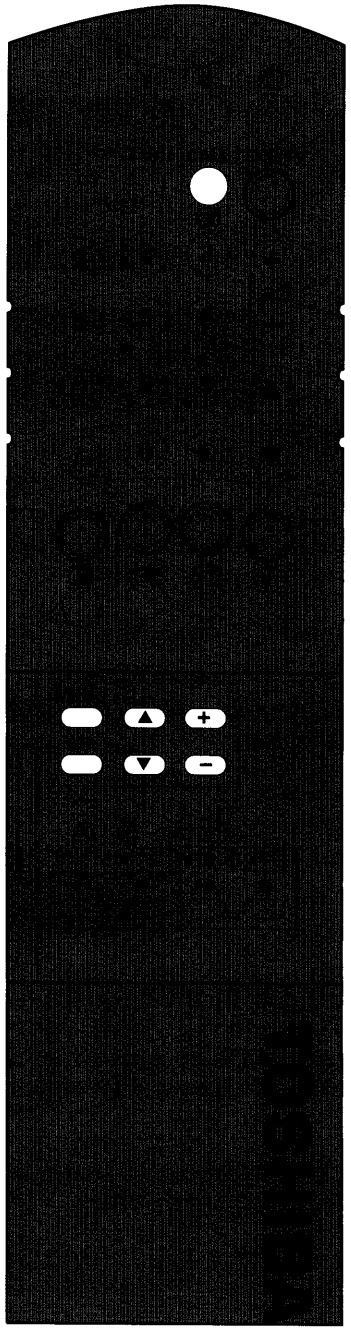


3 Select the strongest signal (ie the best picture and sound). Press the STR button to STORE BBC1 to programme position 1. (**STR: to store** will highlight momentarily).The other choices will be displayed for you to select later.

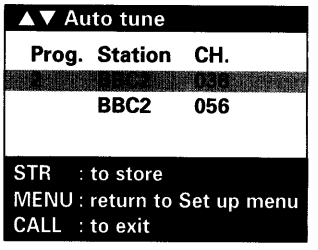
You may only have one selection. A maximum of four selections can be displayed at any time.

Tuning-in

Auto tune:



4 Position 2 will appear showing the BBC2 choices. Repeat steps 2 and 3 to allocate the required signal.

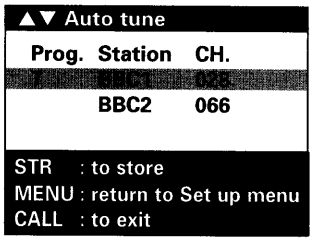


5 Position 5 is allocated to Channel 5 although this may not be available in all areas. Press STR to continue this procedure.

Position 6 is allocated to the satellite channel.

6 Programme 7 will display the remaining channels which have not yet been allocated.

Use the ▲/▼ buttons to scroll through the list of available channels as each is highlighted the channel will be displayed.



7 Press STR to store the channel you require on programme position 7. When you have stored a channel it will no longer appear in the list. Repeat as required.

When you have finished press CALL to EXIT.

YOU MAY NOW CONNECT SCART LEADS

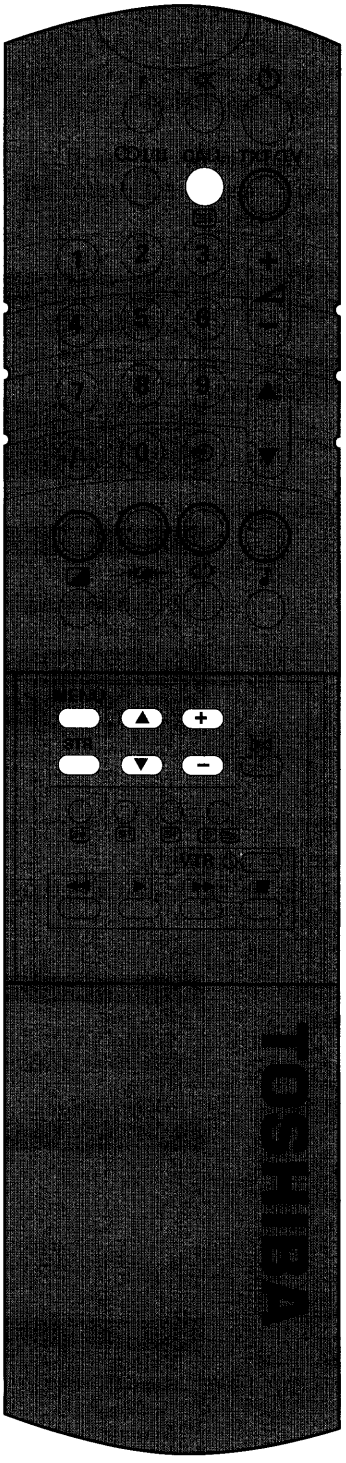
It is not necessary to tune your television to your video. Simply connect the scart leads, insert a tape and press play.

If you are unable to use scart leads, or wish to allocate a programme position to the video refer to page 20 "Tuning to your video" using RF leads.

Tuning-in

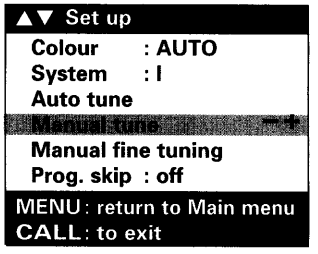
Your Toshiba television may be tuned manually as an alternative to Auto tune.

Manual tune:



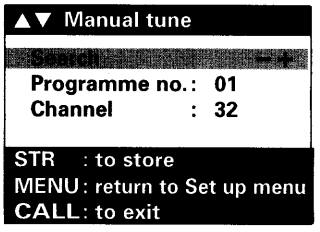
DO NOT PRESS 🔇 OR ANY OTHER BUTTONS WHILST THE SET IS TUNING

1 With the **Set up** menu showing, press the ▼ or ▲ button to highlight **Manual tune.**



2 Press the + button to select the Manual tune display.

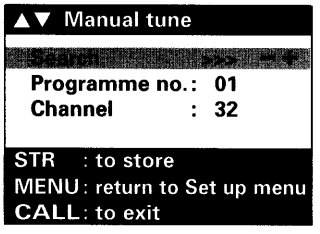
Press the ▼ (or ▲) button to *highlight* **search.**



3 Press the + button to search up the band (>>>) or the − button to search down the band (<<<).

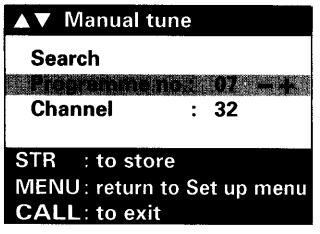
The channel numbers will change as the TV searches.

When a station/satellite is found it will be displayed.

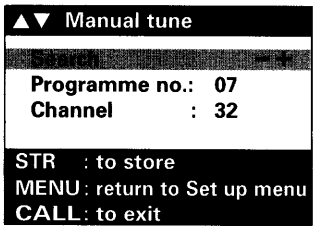


4 Press the ▲ (or ▼) button to *highlight* the Programme No.

5 Press + (or −) button to select the number required.



6 Press the STR button if you wish to store the broadcast displayed (**STR: to store** will highlight momentarily).



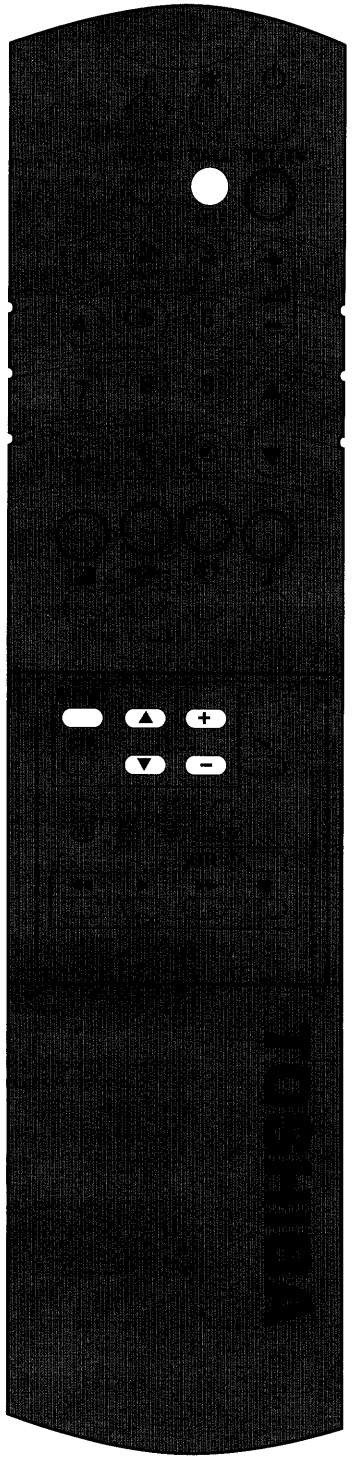
Repeat the procedure for all the remaining programme positions you wish to tune.
Press the CALL button to exit when you have finished.

The display will stay on screen for approx. 15 seconds. If you do not STORE the programme position it will not be held in memory.

YOU MAY NOW CONNECT YOUR SCART LEADS

Tuning-in

Tuning to a video via RF leads, Manual fine tuning:

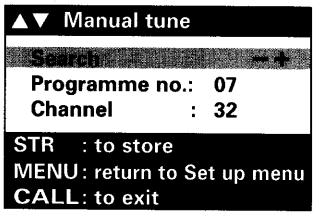


It is not necessary to tune your television to your video. Simply connect the scart leads, insert a tape and press play.
If you are unable to use scart leads, or wish to allocate a programme position to the video see below.

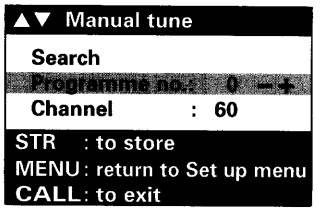
Tuning to your video (connected via an RF lead)
To tune your television to your video disconnect the scart leads and play a pre-recorded tape.

1 Follow steps 1 to 6 (Manual tune) as detailed on page 19.

When the video recorder is found, your pre-recorded tape will be displayed.



It is suggested that position 0 is used.

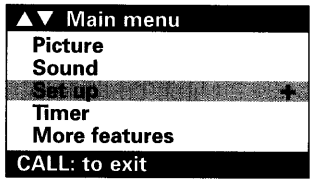


Manual Fine Tuning (Not normally required)
This will enable you to adjust the tuning manually to optimise the picture.

1 Press the MENU button to display the **Main menu**.

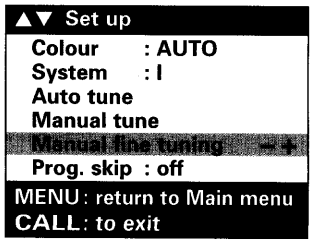
Press the ▲ (or ▼) button to *highlight* Set up.

Press the + button to *select* the **Set up** menu.



2 Press the ▲ (or ▼) button to *select* Manual fine tuning.

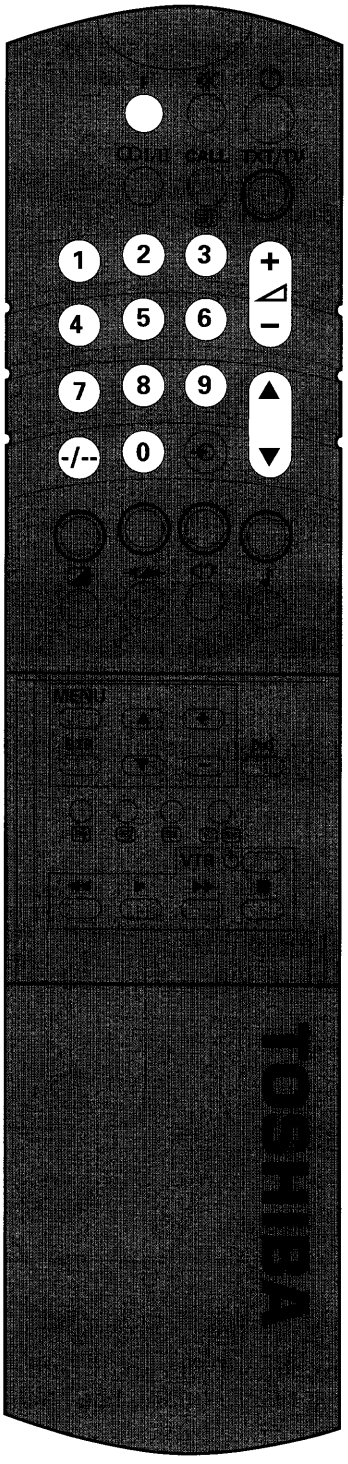
Press the + button to fine tune up, press the − to fine tune down.



Watching TV programmes

NOTE: To identify the current programme position press the CALL button. Press again to cancel the display.

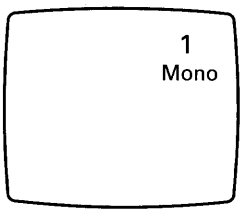
Volume, Changing programme positions using the remote control:



To change programme position

1 To select a programme position press one of the numbered buttons.

The programme position will be displayed in the top right corner of the screen.

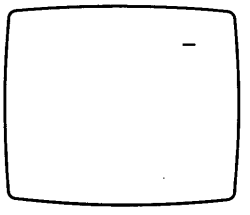


Alternatively:

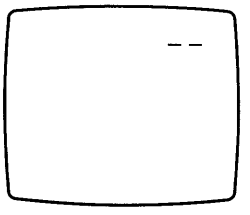
2 You can change the programme position by using the ▲ button to increase by one or ▼ the to reduce by one.

---

1 For programme positions below 9, press the -/-- button to select –. Enter the desired programme position number using the numbered buttons on the remote control.

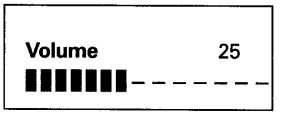


2 For programme positions above 9, press the -/-- button to select – –. Enter the desired 2 digit programme position number (10-99).



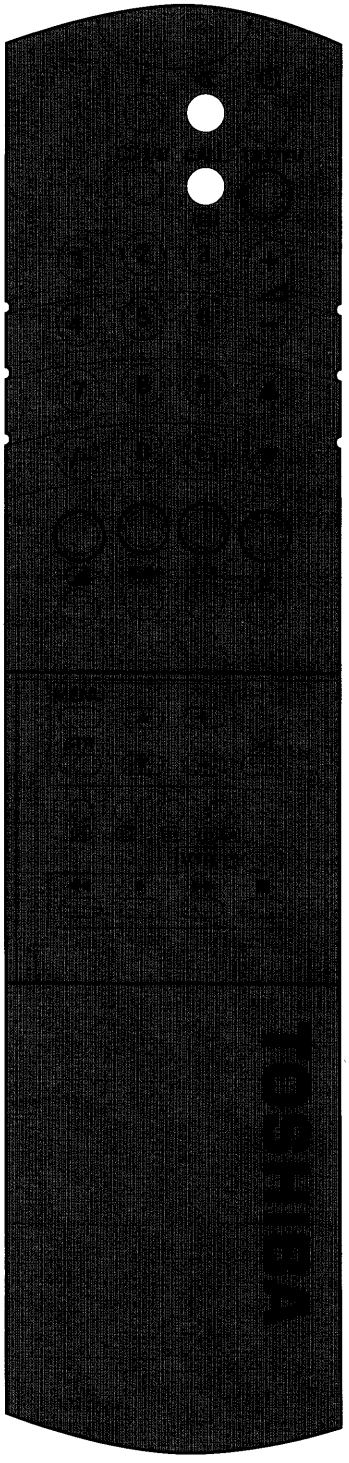
To alter the volume

1 To raise or lower the volume press the ◿ + or − buttons. The display will show the changes. Holding down the F button whilst altering the volume will increase the speed of adjustment.



Picture and sound controls

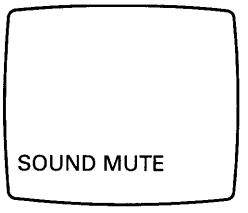
Sound mute:



To mute the sound

The sound can be muted simply by pressing the 🔇 button. SOUND MUTE appears on the screen. Press again to restore the sound.

1 Press the 🔇 button the words SOUND MUTE appear on the screen.



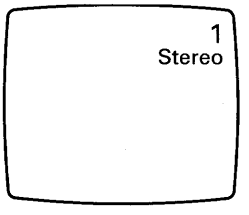
2 Press again to restore the sound.

Keeping the on-screen displays:

To retain the on-screen display

The programme number and the stereo and dual indicator will normally disappear within 20 seconds once the programme number has been changed.

1 To recall and keep the programme number on the screen, press the CALL button.



2 To cancel the programme number display press the CALL button again.

To cancel a menu display

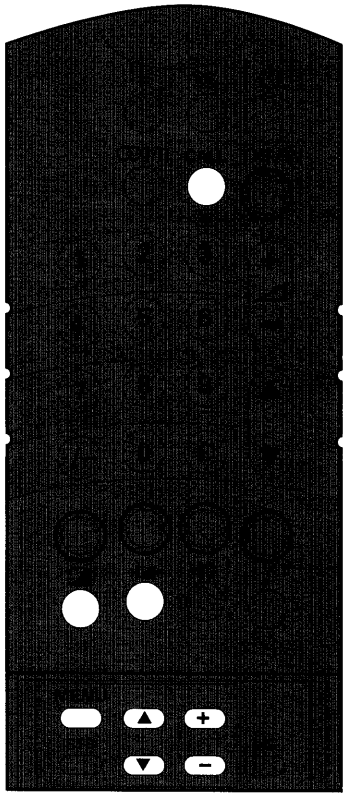
The menu function (eg **Picture, Sound, Set up**) is held on screen for 15 seconds once the MENU button has been pressed.

1 Press the CALL button to cancel the display.

Picture adjustment

There are four picture styles to choose from designed to suit your particular taste.

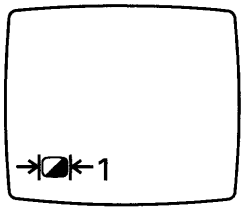
The digital effect increases from picture style →◪←3 up to style →◪←1. ie should you require high levels of contrast but a low digital effect you can choose picture style →◪←3 and then increase contrast and brightness. These settings are stored as →◪←M.

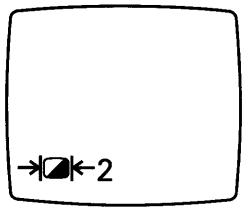


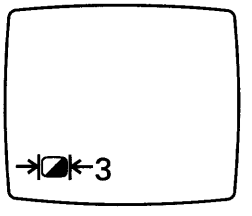
The tint may only be adjusted on a tape which has been recorded & played back on an NTSC video recorder, when in AUTO colour mode as described on page 33.

To select the alternative picture styles

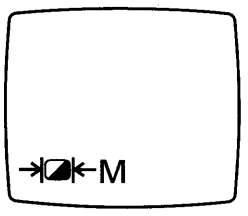
1 Press the →◪← button repeatedly to view the different picture styles available.







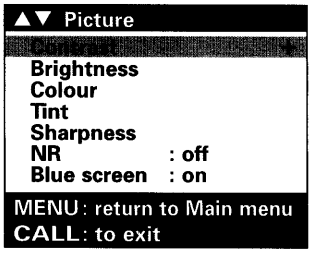
The memory →◪←M will contain your own selection of Contrast, Brightness, Colour, (Tint) and Sharpness as set out below.



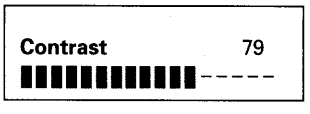
Contrast, Brightness, Colour, Tint and Sharpness Adjustment

1 Press the ◪ button to *select* the **Picture** menu. *

Press the ▲ (or ▼) button repeatedly to *select* between the Contrast, Brightness, Colour, Tint and Sharpness.

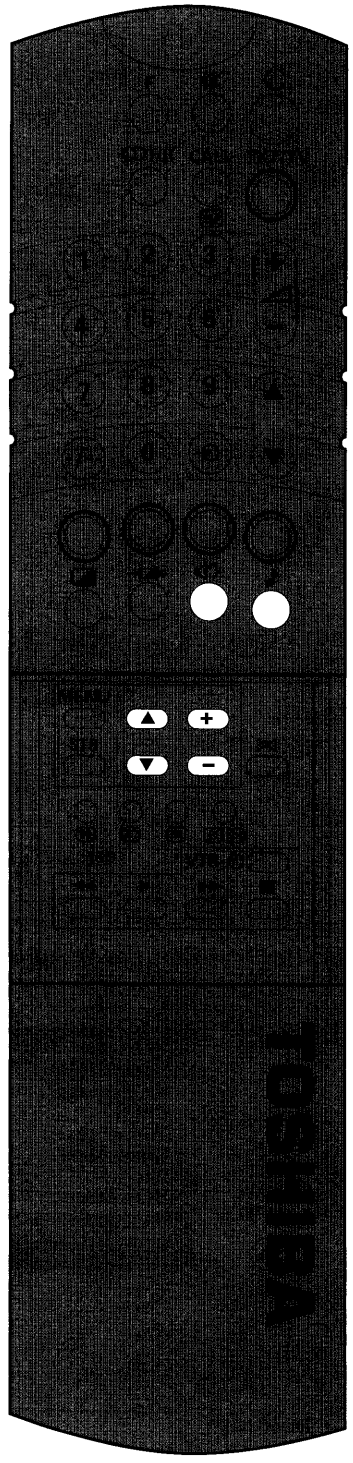


2 Use the + or − buttons to adjust the settings.



* This menu can be accessed by using the buttons on the front of the TV.

Sound adjustment



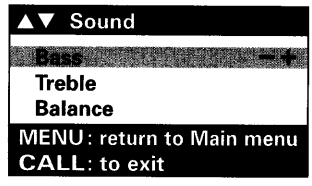
Bass, Treble and Balance Adjustments

1 Press the ♪ button to *select* the **Sound** menu. *

Press the ▲ (or ▼) button repeatedly to *select* Bass, Treble or Balance.

For example: Bass.

Press the + button to *select* the **Bass** display.



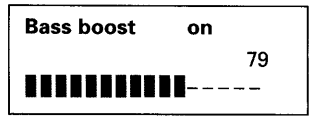
2 Use the + (or −) button to adjust the setting.

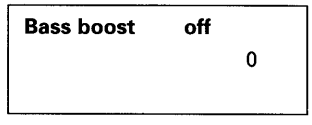
* This menu can be accessed by using the buttons on the front of the TV.

A Bass Boost system has been built into your new Toshiba television which will add a greater depth to the sound.

To select Bass Boost

1 Press the 🔊 button to *select* BASS BOOST 'ON'. Press again to turn it 'OFF'.





2 Press the + (or −) button to adjust the boost level.

Stereo or bilingual broadcasts

This TV set is designed to receive and automatically detect all NICAM/MPX and dual transmissions.
The following describes the operation and displays which accompany these broadcasts.

Stereo/bilingual modes:

If stereo or dual broadcasts are transmitted the word Stereo or Dual will appear in the upper right corner of the screen, after a few seconds the display will disappear. The display will reappear each time you change programme positions.

Some common problems with stereo reception:

The word Stereo does not appear on screen:

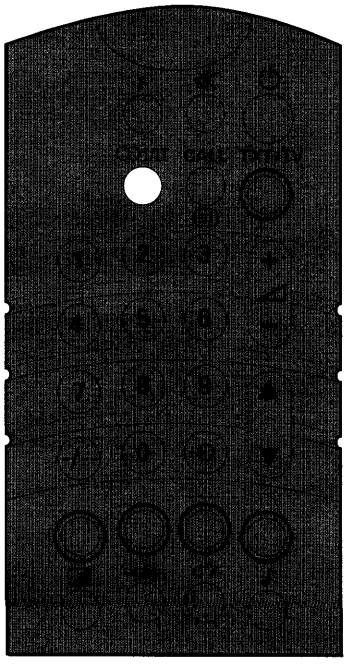
1 It is not a stereo transmission.
2 Your local transmitter has not been upgraded for stereo.

Stereo appears but sound is in Mono

1 You have selected Mono mode.
2 The original soundtrack of the film etc. was recorded in Mono.

Note: For stereo and dual information refer to a TV programme magazine or the text pages for your area.

If transmission is in Mono the ⌀I/II button has no function.

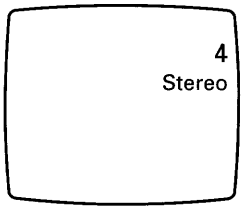


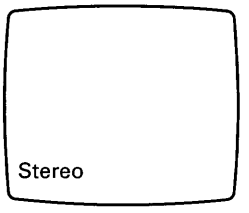
To select stereo/mono mode

1 Select the required programme position.

2 Press the ⌀I/II button repeatedly, to *select* between Stereo and Mono.

(NICAM/MPX broadcasts can be in either Stereo or Mono.)



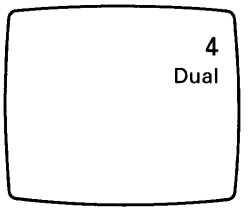


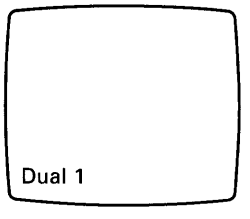
Bilingual transmissions are rare. If bilingual broadcasts are transmitted the word Dual will be displayed.

To select bilingual mode (when transmitted)

1 If the word Dual appears when you select your programme position.

2 Press the ⌀I/II button to *select* between the different options.



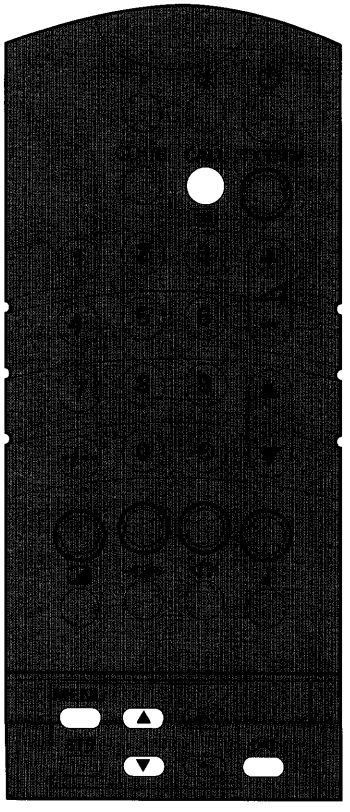


Surround effect selection

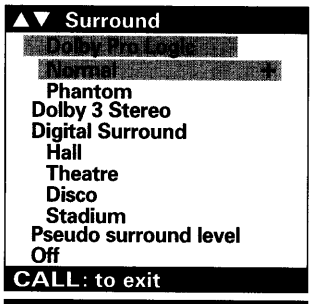
With Toshiba's 'Digital Surround processor' and Dolby Pro Logic Surround your television can simulate a wide range of various surroundings: From Dolby Pro Logic Surround (Normal and Phantom) and Dolby 3 Stereo to Hall, Theatre, Disco, Stadium and Pseudo surround.

Toshiba's TV's with Dolby Pro Logic Surround uses a combination of speakers (front-left, front-right, phantom-centre and two rear speakers) to reproduce in the living room the surround effects now available on most videos and an increasing number of TV broadcasts.

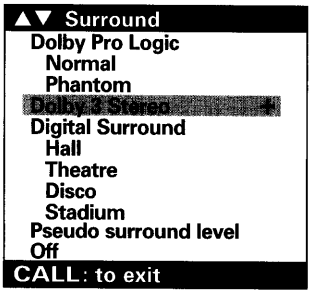
With Toshiba's Digital surround processor, various effects are available to simulate a wide range of listening environments using the surround speakers. Whatever you are watching, it's easy to choose the sound mode that will make you feel as if you are right there in the concert hall, movie theatre, disco or stadium and even mono soundtracks can be enhanced when in pseudo mode.



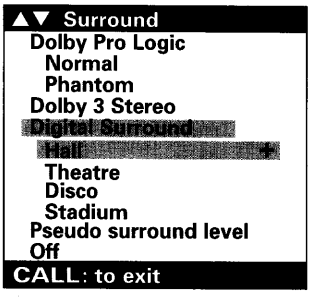
1 Press the ⋈ button to *select* the SURROUND display. Press the ▲ (or ▲) button to *select* between the modes available. DOLBY PRO LOGIC - NORMAL or PHANTOM



DOLBY 3 STEREO

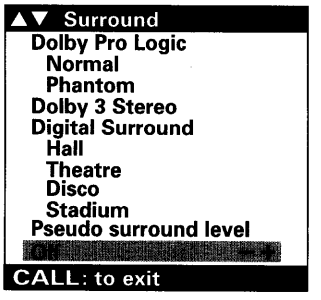


DIGITAL SURROUND
HALL **OR**
THEATRE **OR**
DISCO **OR**
STADIUM



PSEUDO SURROUND

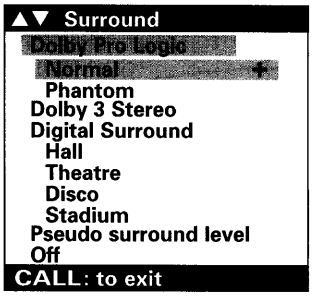
OFF (Surround Sound off, normal stereo).

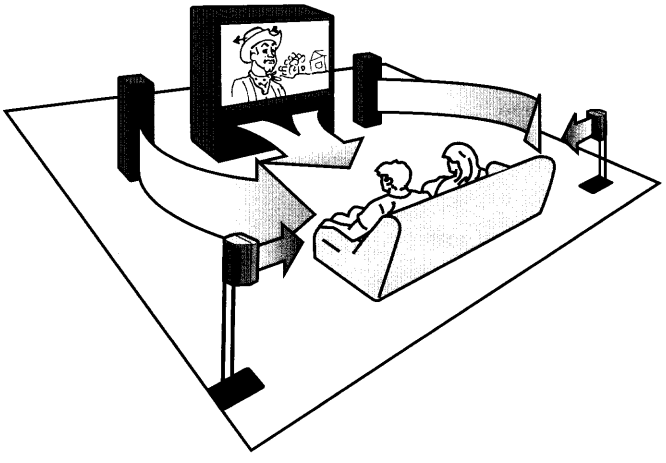


Dolby Pro Logic Surround

The illustrations below show the sound effects available from the three modes, and the speakers used.

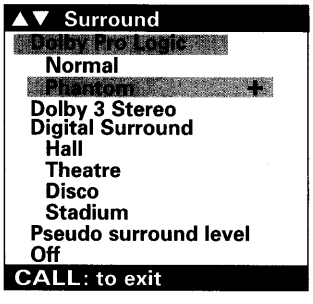
Dolby Pro Logic: Normal

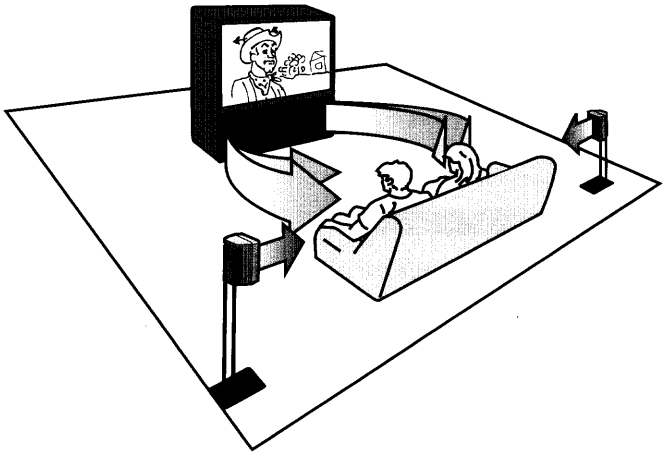




Dolby Pro Logic: Normal uses a combination of 5 speakers - front-left, centre, front-right and two rear speakers to reproduce in the living room the surround effects now available on most videos and an increasing number of TV broadcasts.

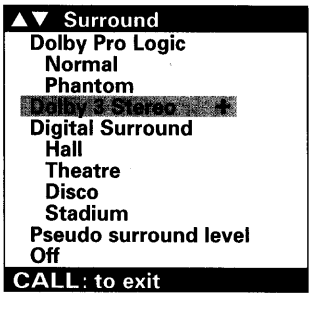
Dolby Pro Logic: Phantom

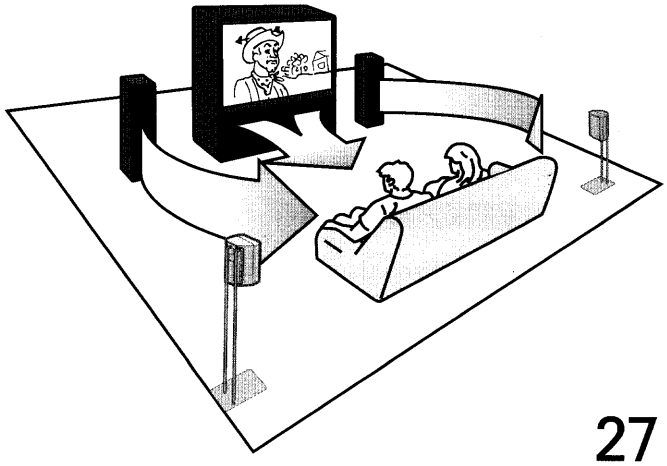




Dolby Pro Logic: Phantom uses a combination of 4 speakers - front-left, front-right and two rear speakers. This mode will enable you to enjoy the effects of Dolby Pro Logic Surround without requiring external speakers.

Dolby 3 Stereo:



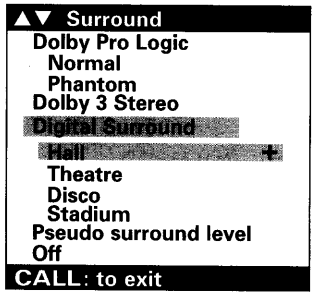


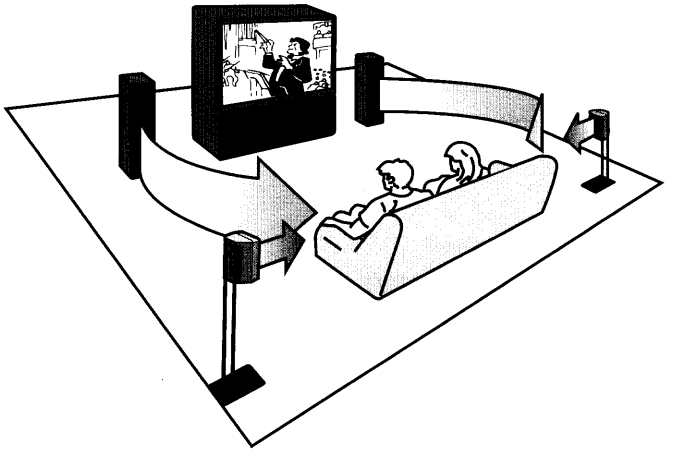
Dolby 3 Stereo uses a combination of 3 speakers - front-left, centre and front-right. If you choose not to use the rear speakers, this mode will produce a strong, wide stereo surround effect.

Digital surround processor

Note: Hall, Theatre, Disco, and Stadium effects are only available on a stereo signal. Pseudo surround works on both mono and stereo signals. The Digital Surround mode works equally well with either internal or external speakers connected. All of the Digital surround modes are adjustable, the method of adjustment described below is the same for all the Digital Surround effects.

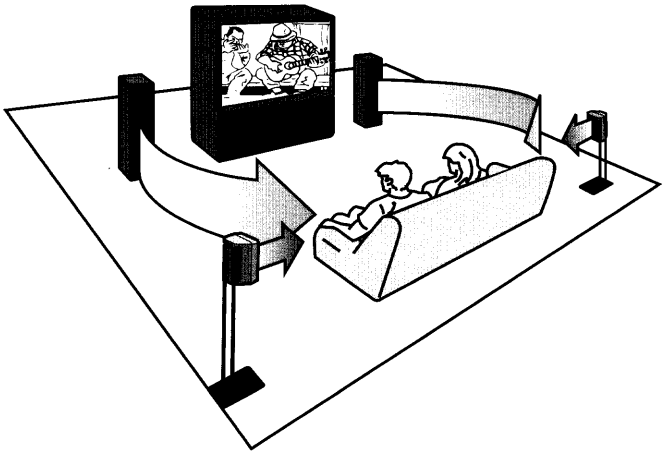
Surround Sound: Hall





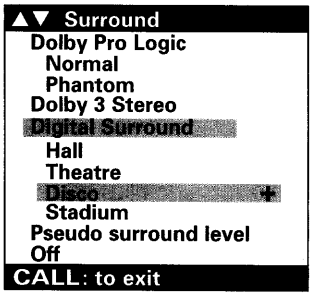
Surround Sound: Hall uses a combination of 4 speakers - front-left, front-right and two rear speakers to reproduce in the living room the surround effects similar to those experienced in a concert hall with a seating capacity of 1500.

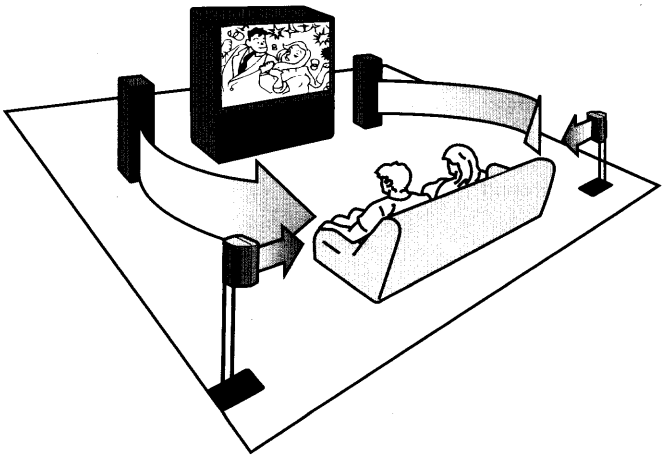
Surround Sound: Theatre



Surround Sound: Theatre uses a combination of 4 speakers - front-left, front-right and two rear speakers to reproduce the surround effects similar to those experienced in a movie theatre filled with a rich warm sound. Ideal for movies with stereo sound.

Surround Sound: Disco



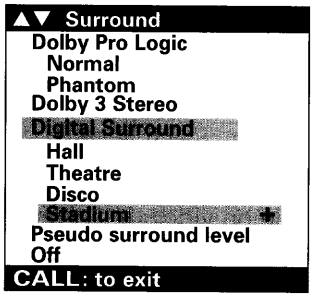


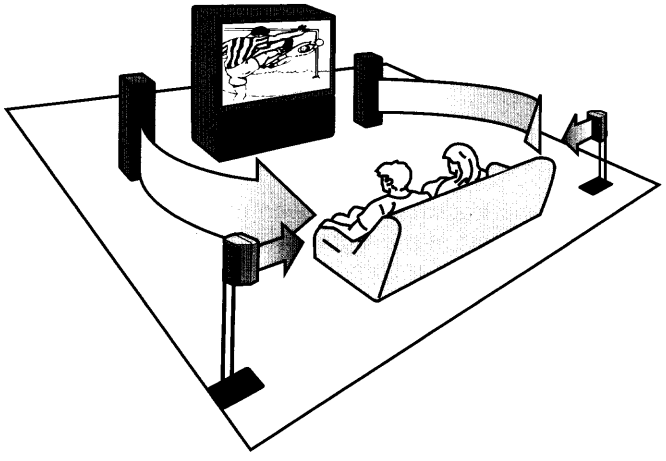
Surround Sound: Disco uses a combination of 4 speakers - front-left, front-right and two rear speakers to create the atmosphere of a room so full of music that it seems to engulf the listener. An ideal sound mode for listening to pop videos.

Digital surround processor

Note: Hall, Theatre, Disco, and Stadium effects are only available on a stereo signal. Pseudo surround works on both mono and stereo signals. The Digital Surround mode works equally well with either internal or external speakers connected. All of the Digital surround modes are adjustable, the method of adjustment described below is the same for all the Digital Surround effects.

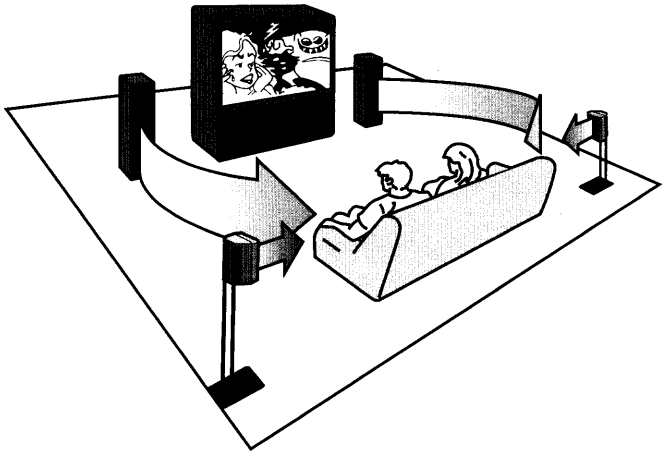
Surround Sound: Stadium





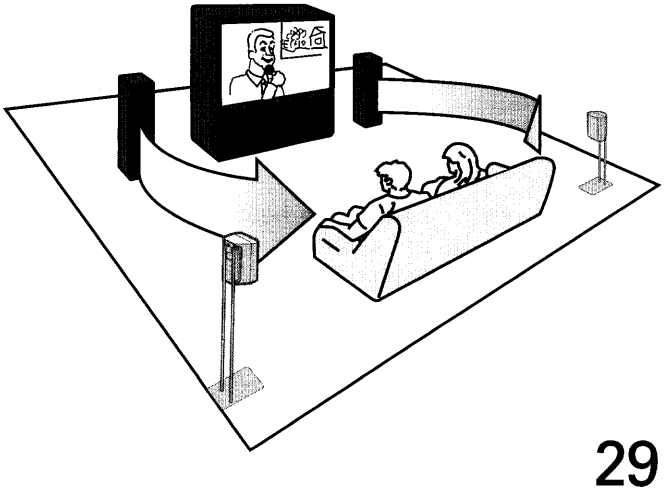
Surround Sound: Stadium uses a combination of 4 speakers - front-left, front-right and two rear speakers to reproduce the surround effects similar to those experienced in a large football or baseball stadium packed for a live game.

Surround Sound: Pseudo



Surround Sound: Pseudo uses a combination of 4 speakers - front-left, front-right and two rear speakers to create a synthetic sound effect for movies and TV shows recorded in mono.

Surround Sound: Off



Surround Sound: Off uses only the front left and right speakers. This mode can be selected for watching news broadcasts and the like which require no special sound features.

Dolby Pro Logic Surround

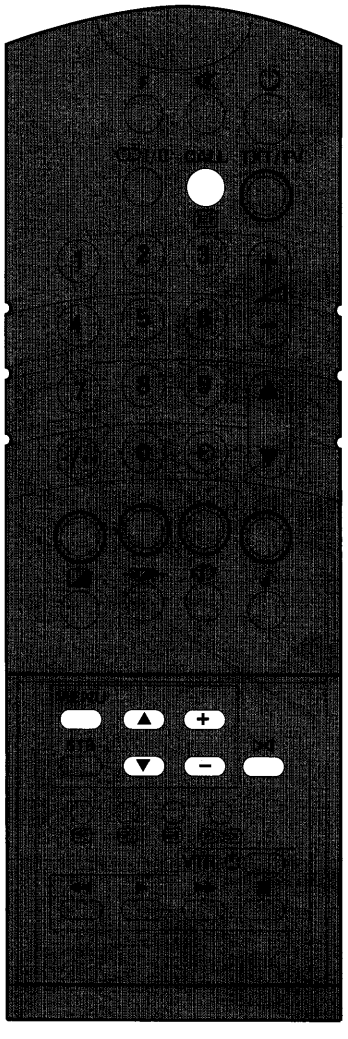
The realistic sound of the cinema is now available from your Toshiba television. This amazing 3 dimensional sound effect is available from any video and laser disk recorded in Dolby Surround and from an increasing number of TV broadcasts; **bear in mind that you need a stereo video recorder, connected via the scart lead provided, to obtain the effect from a video tape (which is recorded in Dolby Surround).**

Dolby Pro Logic Surround and Dolby 3 Stereo

Part of the excitement of a great film in the cinema often comes from the soundtrack. Hearing thunder rumble round the auditorium, or being surrounded by the atmospheric sounds of the jungle can make all the difference to the extent that we are drawn into a film.

These effects are usually created in the cinema by Dolby Stereo, a unique sound recording system which adds depth and sensitivity to a stereo sound track by projecting a surround track behind and around the audience.

This surround track has now been used on almost 5,000 films, most of which are now available on video. It is also broadcast as part of the signal when TV companies show these feature films in Nicam stereo. But until now, ordinary TV's were unable to 'unlock' this track and play it back around and behind the viewer.



Please note: Inserting the headphone jack will mute the sound from all speakers and deliver a normal stereo left and right signal. There are no DSP effects available when using headphones.

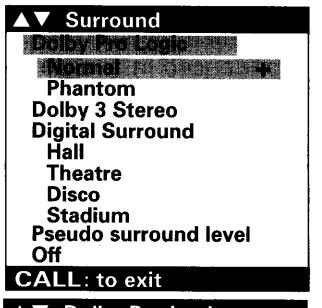
To select Dolby Pro Logic Surround

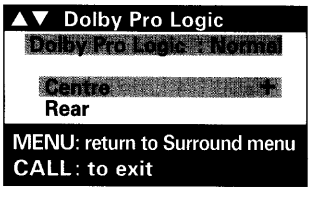
1 Ensure that the external speakers are connected and the speaker selection switch is set to EXT (see page 7).

Press the ⧓ button to *select* the SURROUND display. Press the ▲ (or ▼) button to *select* between DOLBY PRO LOGIC, NORMAL and PHANTOM.

2 Press the + button again to bring up the levels display.

To set the levels use the test routine described on page 31.

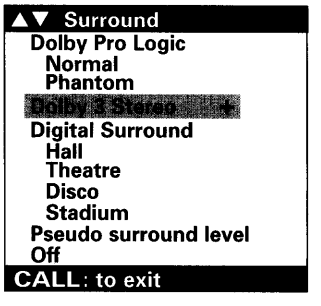




To select Dolby 3 Stereo

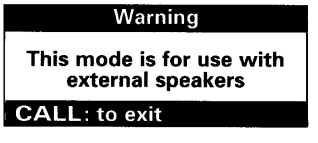
1 Press the ⧓ button to *select* the SURROUND display. Press the ▲ or ▼ button to *select* DOLBY 3 STEREO. Press the + button to view the level set.

2 To adjust the level use the test routine described on page 31.



If you have not connected a pair of external speakers you can select Dolby Phantom to enjoy some of the effects of Dolby Pro Logic Surround without requiring external speakers.

If you select either Dolby Pro Logic Normal or Dolby 3 Stereo and do not set the speaker selection switch to EXT you will see a warning screen displayed.



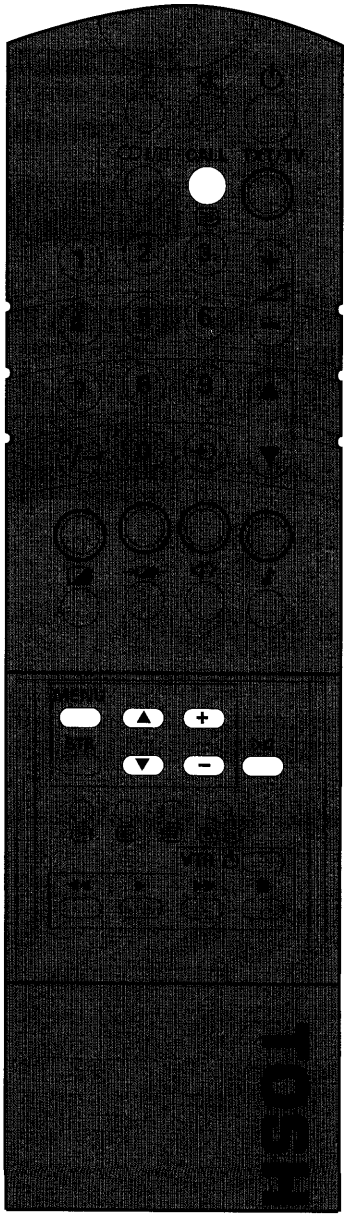
Press the CALL button to exit.

Dolby Surround level settings

When running the following Test sequences ensure that you are seated where you would normally watch the TV. These Test sequences are designed to let you balance all the speakers to the same volume level. The method of adjustment described below is the same for all the Dolby Surround effects (Dolby Pro Logic Surround and Dolby 3 Stereo). The viewing position is important to gain the maximum effect from this TV. **Note:** To adjust the front left and right balance see page 24. Once the levels have been set they will need little or no adjustment.

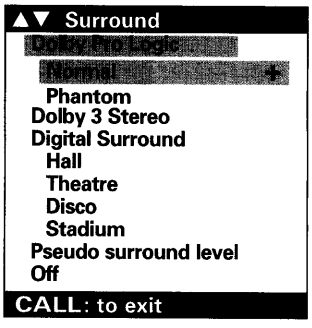
Dolby Pro Logic TEST mode:

In order to get the best sound response from your new Toshiba TV we strongly recommend that adjustments should be made only whilst running the TEST menu (all the speaker levels are fully adjustable). The TEST will play a 'white noise' through each of the speakers in turn. The display will show you which speaker is in play, adjustment to the speaker levels may be made whilst it is highlighted on the screen.

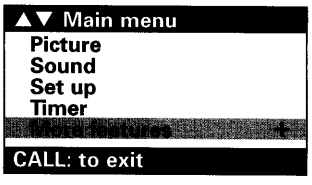


To select Dolby Pro Logic TEST mode: Pro Logic Normal/Phantom and Dolby 3 Stereo

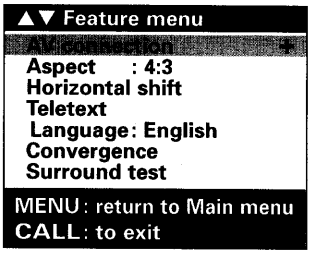
1 Press the button to bring up the **Surround** display. Press the (▲) (or (▼)) button to *select* the mode required.



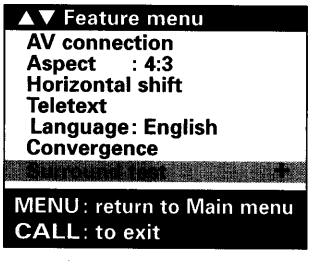
2 Press the MENU button to *select* the **Main menu**. Using the (▲) (or (▼)) button, *highlight* **More features**.



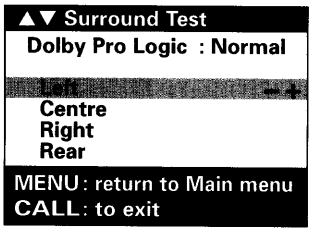
3 Press the (+) button to *select* the **Feature menu**.



4 Press the (▲) (or (▼)) button to *highlight* Surround test.



5 Press the (+) button to *select* the Surround Test option. Adjust the Centre and Rear levels to match the Front Left and Right by pressing the (+) (or (−)) button whilst the relevant display is highlighted.



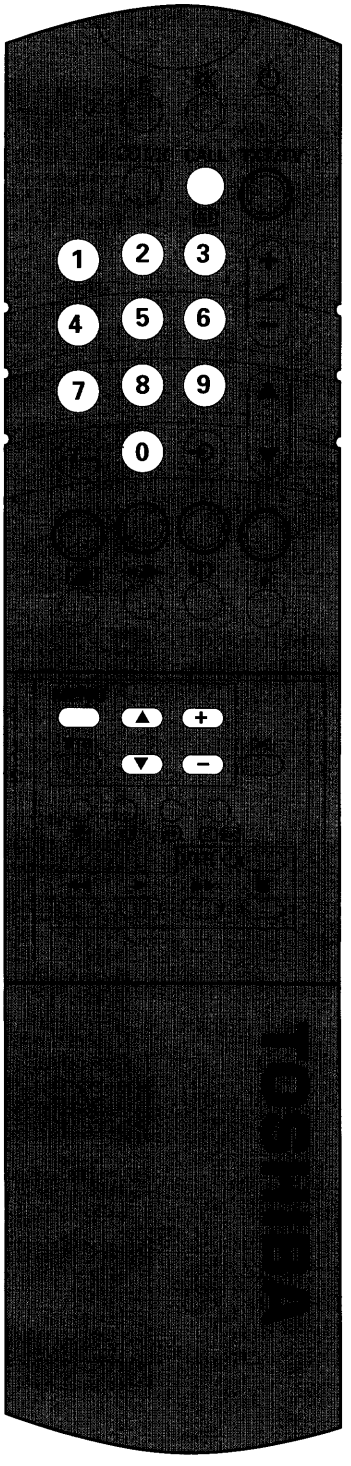
6 To end the TEST press the CALL button.

Note: This procedure can be repeated for each of the Dolby Pro Logic modes. The settings are automatically stored for each mode.

Digital surround level settings

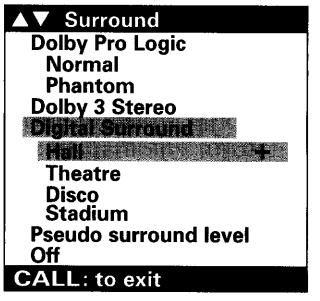
Note: Hall, Theatre, Disco, and Stadium effects are only available on a stereo signal. Pseudo surround works on both mono and stereo signals. All of the Digital surround modes are adjustable, the method of adjustment described below is the same for all the Digital Surround effects.

Digital Surround Test mode

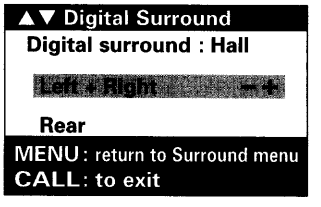


To select the Digital Surround Test mode

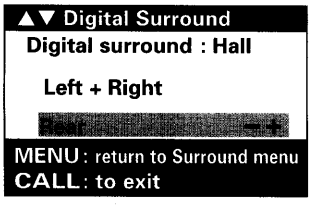
1 Press the ▷◁ button to bring up the **Surround** display. Press the ▲ (or ▼) button to *select* the Digital Surround mode required.



2 Press the + button to *select* the Digital Surround adjustment display.



3 Adjust the Rear levels to match the Front Left and Right by pressing the + (or −) button whilst the relevant display is highlighted. Use the ▲ (or ▼) button to move the highlight bar.

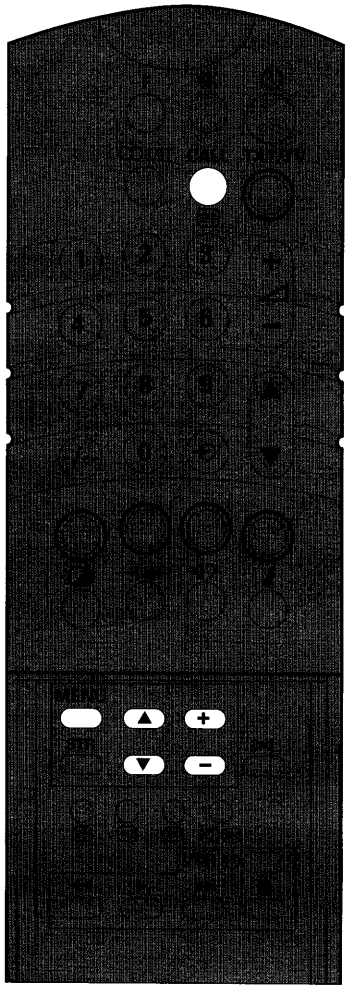


4 To end the TEST press the CALL button.

Note: This procedure can be repeated for each of the Surround modes. i.e. Hall, Theatre, Disco and Stadium.

The settings are automatically stored for each mode.

Colour system selection, Programme skip

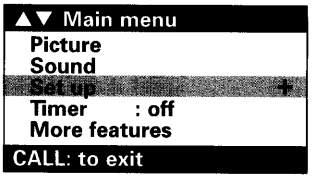


Selecting AUTO as described below, the TV will automatically display the best Colour system for the current transmission. If the picture quality is poor, improvements may sometimes be achieved by trying a different Colour mode.

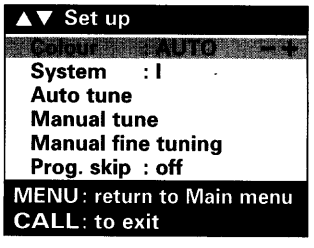
To select Colour System

1 With the **Main menu** display showing.

Press the ▲ (or ▼) button to *highlight* Set up.

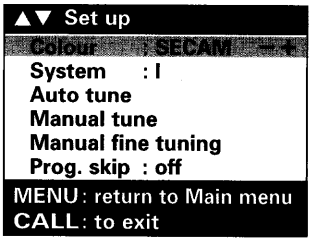


2 Press the + button to *select* the **Set up** display.



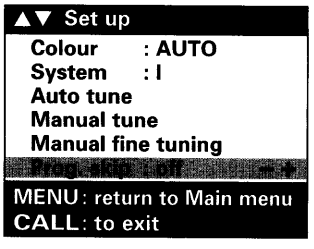
3 With Colour *highlighted* press the + (or −) button to *select* the required colour system.

Auto (which will automatically sense the system transmitted).
PAL
SECAM
4.43NTSC or
3.58NTSC.



To select Programme Skip

1 Select the programme position to be skipped. With the adjacent display showing. Press the ▲ (or ▼) button to *select* Prog. Skip.



2 To turn the Programme Skip option on or off use the + (or −) button.

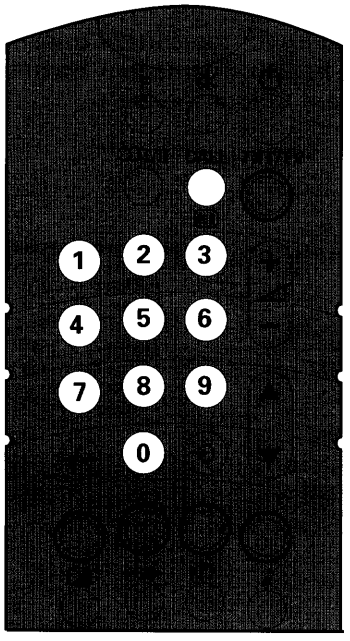
NOTE: A * will appear beside a skipped programme position when using the numbered buttons on the remote control.

Programme Skip:

The Skip feature enables you to prevent certain programme positions from being viewed.
For example, if you are going out for the evening and you do not wish your children to watch a certain film etc., you can skip the programme position and take the remote control with you. The TV will function normally, using the controls on the front of the TV but the set will not show the skipped programme position.

Timer, Horizontal shift

Timer:

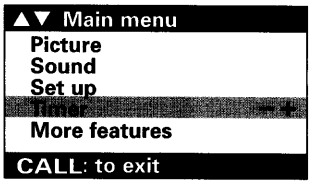


The Timer is especially useful if you want the television to turn itself on or off after a selected period of time. For example: If you want the set to turn itself on in 30 minutes time and watch programme 3 simply follow the procedure indicated.
Activation of the Timer is indicated by a green warning light on the front of the TV (see page 10).

To select the Timer menu

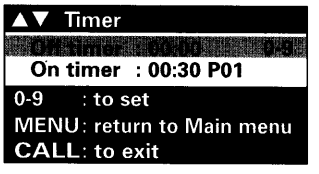
1 Press the MENU button to display the **Main Menu**.

Press the ▲ (or ▼) button repeatedly to *highlight* Timer.



2 Press the + button to display the **Timer** menu.

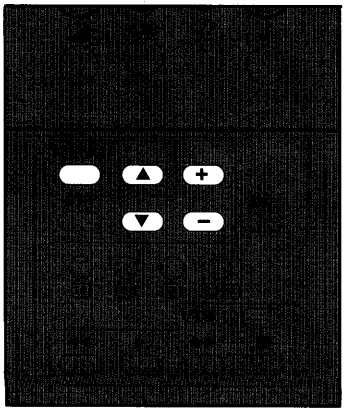
Use the numbered buttons to set the ON or OFF delay time, e.g. On in 30 minutes.



Note: When setting the ON time you will be required to enter the selected programme position. The set must then be put into standby mode (see page 10).
The maximum time delay is 12 hrs 59 mins.

Horizontal shift:

The Picture Position
This is factory set and should need little or no adjustment, however, if when viewing, the display is to one side, adjustment to a central position can be made.



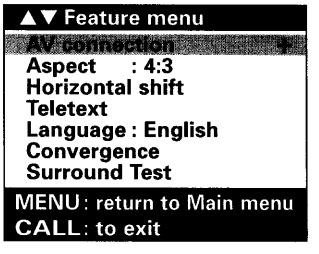
To select Horizontal shift

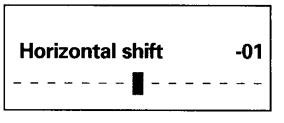
1 Press the MENU button to display the **Feature menu**.

Press the ▲ (or ▼) button to *highlight* Horizontal shift.

Press the + button to *select* Horizontal shift.

Press the + (or −) button to adjust .





Aspect

This feature has been included for programmes which are transmitted in the wide screen format.

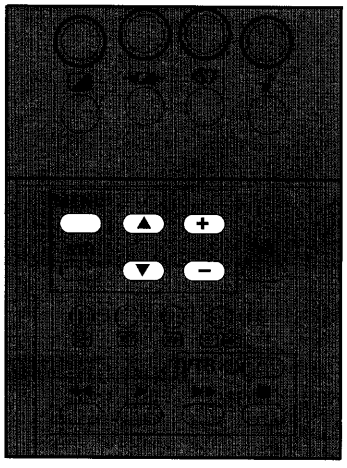
Aspect:

Your new Toshiba TV is capable of showing TV broadcasts in 2 formats:
Normal (4:3) and
Wide Screen (16:9).

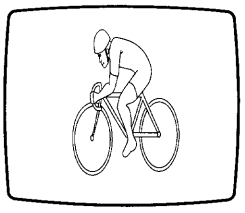
Most feature films are shot in wide screen (16:9) format, which is then compressed at the studio. With the growth of satellite broadcasts, more and more films are broadcast in Wide Screen format.

The aspect ratio of the transmission can be corrected by a feature known as picture compression. When viewing a transmission in this mode the images on the screen are restored to their normal proportions. Black bars will appear at the top and bottom of the screen.

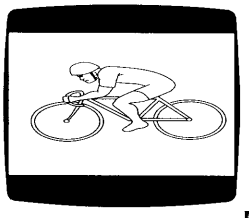
NOTE: There could be interference lines outside the viewing area, this is normal.



If you view a Wide Screen broadcast in Normal (4:3) mode the aspect ratio (height compared to width) will be incorrect as shown in the adjacent display.



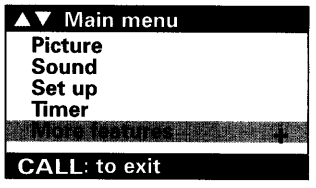
Alternatively, viewing a normal transmission whilst in 16:9 format will result in the images being reduced as shown in the adjacent display.



To alter aspect ratio

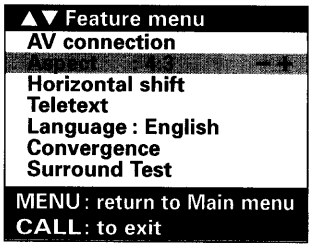
1 Press the MENU button to display the **Main Menu**.

Press the ▲ (or ▼) button repeatedly to *highlight* More Features.

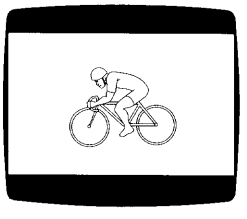


2 Press the + button to display the **Feature menu**.

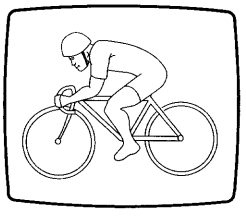
Press the ▲ (or ▼) button repeatedly to *highlight* Aspect.



3 Press the + button to alter the aspect ratio and the images are restored to their normal proportions for wide screen transmission.



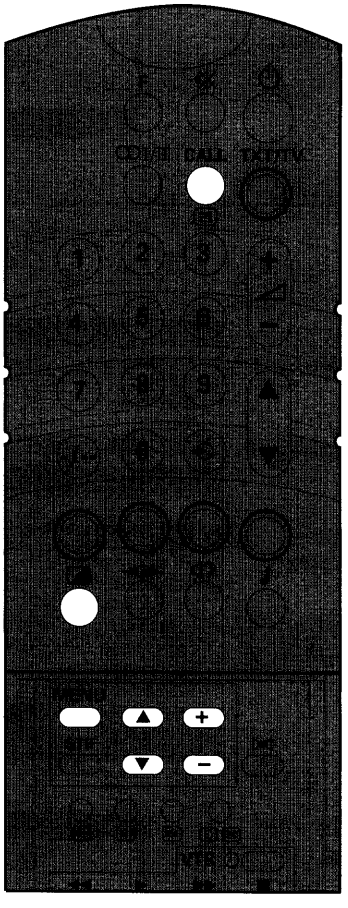
4 To revert to normal 4:3 format, simply press the + button again.



Additional menu items

AV connections:

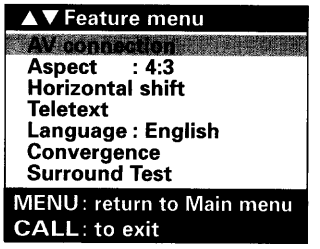
This feature allows you to select the type of video recorder to be connected to scarts 2 or 3 on the back of the television. The S-Video enables the television to receive from Super VHS video recorders, the AV enables the television to receive from standard video recorders.

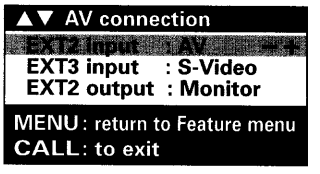


To select input signal for scart 2 and scart 3

1 With the adjacent display showing. Press the ▲ (or ▼) button to *highlight* AV connection, press the + (or −) to *select* the AV connection display.

2 Press the ▲ (or ▼) button to *highlight* the required external input, press the + (or −) to *select* the required input (AV or S-video).

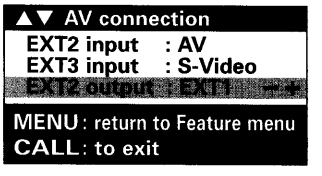




This feature enables you to select the source to output to Scart 2. e.g. If you connect a stereo satellite receiver to Scart 1 and a stereo video recorder to Scart 2, and select EXT1 as the EXT2 output (ie you will output the signal received through Scart 1 directly out to Scart 2), you will be able to record the stereo satellite transmission in stereo.

To select output signal for scart 2

1 Press the ▲ (or ▼) button to select EXT2 output, then press the + (or −) button to select between Monitor, EXT3, EXT2, EXT1 or TV.



Noise reduction and Blue screen:

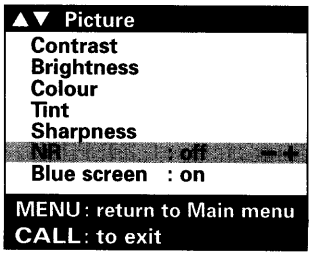
The Noise Reduction (NR) feature can improve the picture quality of a weaker signal.

The Blue Screen control instructs the television set to mute the sound and switch the screen to blue when no signal is being received and will switch to standby after approximately 20 minutes.

To select Noise Reduction (NR) and Blue Screen

1 Press the ◪ button to bring up the adjacent display. Press the Menu control ▲ (or ▼) buttons to select NR or Blue screen.

2 To turn on (or off) press the + (or −) buttons.

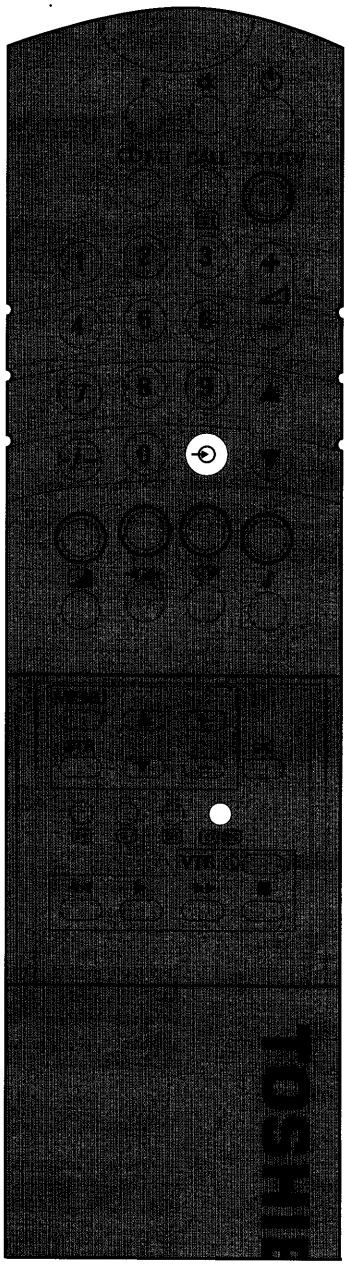


Manual Input Selection, Time display

NOTE: To identify the current programme position press the CALL button. Press again to cancel the display.

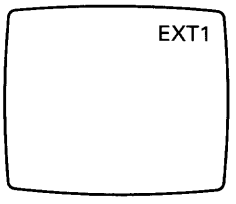
Manual Input Selection:

Having connected your video recorder, satellite receiver etc. you may select it with the external source selection button ⊖.

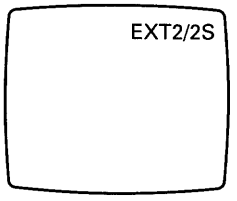


Manual Input Selection

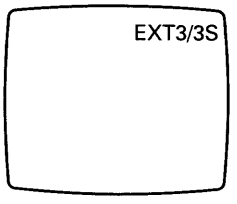
1 If the TV does not switch over automatically, press the ⊖ button to bring up the adjacent display. This will set your TV to a video connected through Scart 1 (EXT1) ⊏→(1).



2 Press the ⊖ button again to *select* the equipment connected to Scart 2 (EXT2 or EXT2S) ⊏→(2).



3 Press the ⊖ button again to *select* the equipment connected to Scart 3 (EXT3 or EXT3S) or input 3, ⊏→(3), on the back of the TV or input 3, ⊖(3), on the front of the TV.

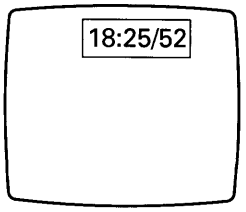


To return to TV mode simply press one of the numbered buttons on the remote control. To view the auxiliary equipment once again, simply press the ⊖ button.

Time display:

To select the Time display

If you press the ⏲ EX button whilst watching a normal TV broadcast, you will see a very accurate time display appear in the top right corner of the screen.
ie 6.25 and 52 seconds p.m.

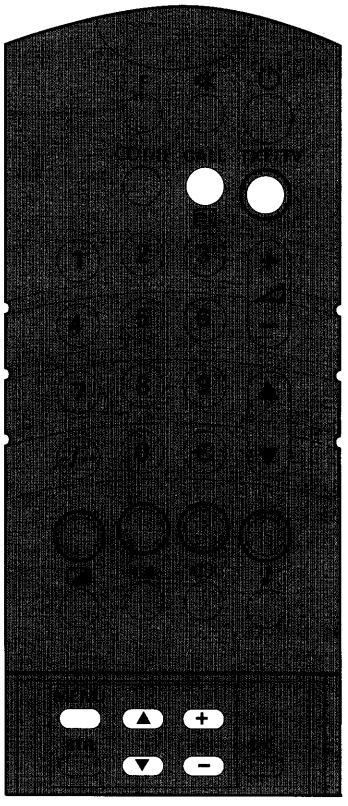


Teletext

DON'T leave a stationary image on the TV screen, such as Teletext, computer displays etc, as they can become permanently ingrained on the screen.

Character set for Teletext:

The Character-1/Character-2 option enables the display of different alphabets when using Teletext.

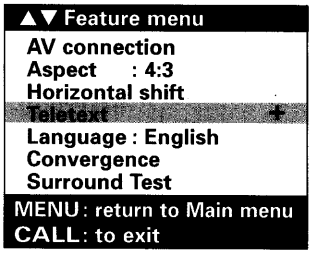


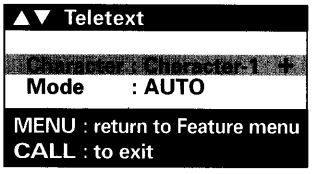
To select Character set for Teletext

1 Press the MENU button and using the ▲ (or ▼) buttons *highlight* **More Features**. Press the + button to *select* the **Feature menu.**

2 Press the ▲ (or ▼) button repeatedly to *highlight* Teletext.

Press the + button to *select* the Character display. Press + (or −) button to *select* the required character set.





CHARACTER-1		
English	Français	Deutsch
Italiano	Español	Jazyk
Svenska	Português	
CHARACTER-2		
Po polsku	Romana	Jazyk
Srpski	Français	Deutsch
Italiano	Svenska	

Teletext mode:

The Teletext System on this television offers two different ways of viewing text.

Selecting AUTO as described opposite, the TV will automatically display the best text system available ie if FASTEXT is transmitted it will be displayed. If no FASTEXT is available, normal text will be displayed.

Selecting LIST will enable you to 'link' chosen pages. (see page 39)

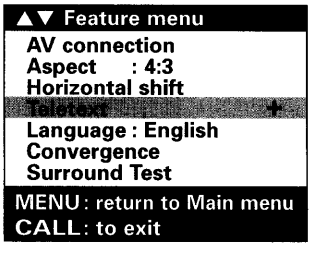
To select Teletext mode

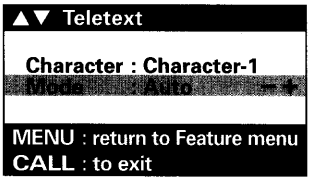
1 With the **Feature menu** display showing.

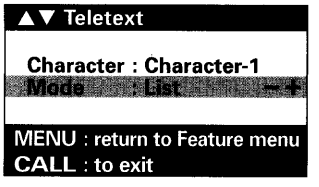
Press the ▲ (or ▼) button repeatedly to *highlight* Teletext.

2 Press the + button to *select* the **Teletext** menu.

Press the + (or −) button to *select* between AUTO and LIST modes







Teletext

The Teletext System on this television offers two different ways of viewing text.
The systems available will depend on which system(s) are broadcast by your television broadcast station.
Your Toshiba dealer will be able to advise you.

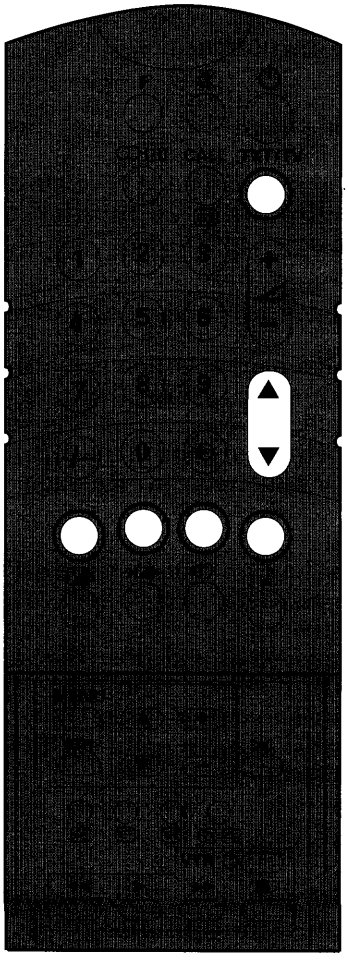
Using Teletext:

When you first select teletext you will see an index page which briefly outlines the main subject areas and their relevant page numbers. You can access any teletext page by entering a 3 digit page number using the numbered buttons on the remote control.

To advance to the next page of teletext, press the ▲ button, to go back to the previous page press the ▼ button.

FASTEXT is a method of viewing teletext pages by related subjects. These subject areas are grouped by the broadcast studio and are selected by pressing one of the associated coloured prompt buttons on the remote control.

LIST mode enables you to select an INITIAL page and four user selected teletext pages on any programme position 0-9.



Using AUTO

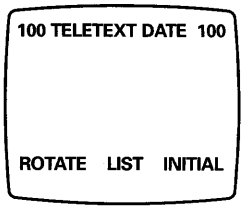
Press the TXT/TV button to select teletext.

If FASTEXT is available, you will see 4 coloured titles at the base of the TV screen. To access any given subject simply press the relevant coloured button on the remote control.
If FASTEXT is not available, you can access any page simply by entering a 3 digit page number. For further information on your particular text system(s) see the broadcast teletext index page or consult your local Toshiba dealer.

Using LIST Mode

1 Press the **TXT/TV** button to select teletext.

2 To programme the set to hold 4 pages in memory. (Programme positions 0-9). Select the LIST function by pressing the GREEN button.

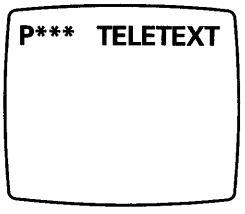


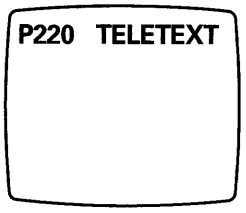
3 Enter the first page number then press the GREEN button. The page number in the lower right corner of the screen will appear in purple. (If the number reverts to white simply press the GREEN button again.) Repeat step 3 for each of the desired 4 pages.

4 To view the selected pages press the RED button for ROTATE.

5 To pre-programme an INITIAL page. Select the INITIAL function by pressing the YELLOW button. P*** will appear in the top left corner of the screen. Enter the required 3 digit page number. As you key in the desired INITIAL page, for example page 220, the numbers will replace the ***.

Whenever text is first selected on this programme position this INITIAL page will be displayed.



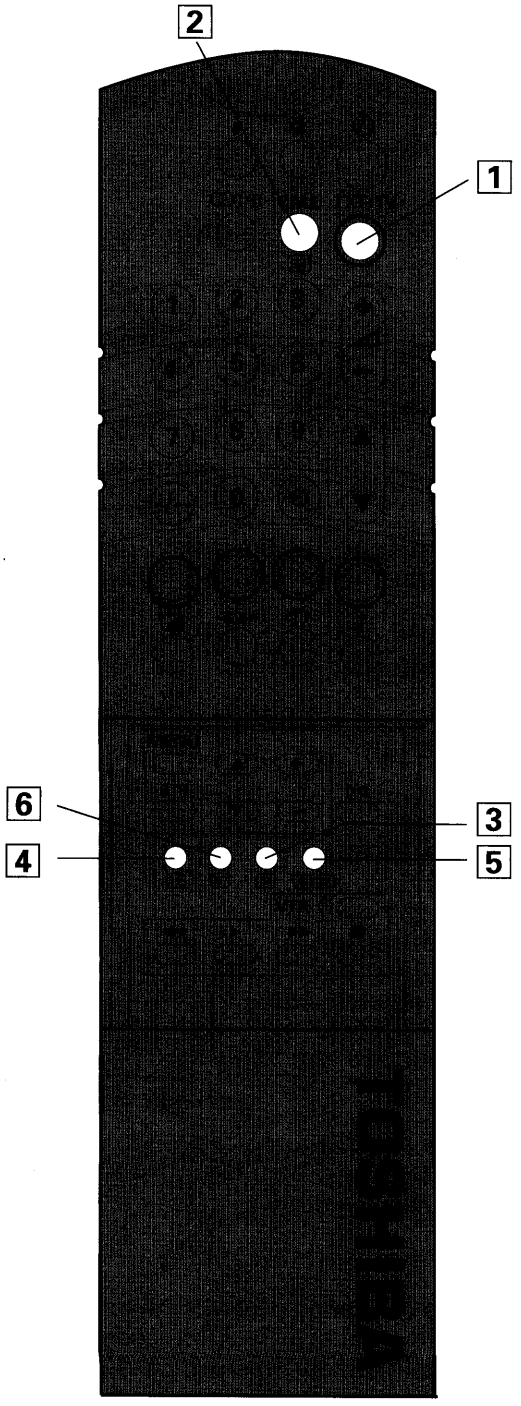


Note: It will not be possible to change programme position or use any of the other functions whilst in Teletext mode, you will have to cancel the teletext first by pressing the **TXT/TV** button.

Teletext buttons on the remote control

Below is an introduction to the teletext buttons on your remote control and their functions.
Please Note: It is not possible to change programme positions whilst in teletext mode.

Note: It will not be possible to change programme position or use any of the other functions whilst in Teletext mode, you will have to cancel the teletext first by pressing the **TXT/TV** button.



1 TXT/TV To display a page of teletext:

Press the **TXT/TV** button to display the initial page. Press again to superimpose the teletext over a normal broadcast picture. Press again to return to normal TV mode.

2 To display an index/initial page:

Fastext-Index Page
Press the button to call up the index page for the subject area you are viewing. If you are viewing a section index, by pressing the button again you will see the general index.

List-Initial Page
Press the button to call up the initial page as programmed on page 39.

3 To enlarge the teletext display size:

Press the button once to enlarge the top half of the page, press again to enlarge the bottom half of the page. Press again to revert to the normal size.

4 To hold a wanted page:

At times it is convenient to hold a page of teletext. Press the button and the word HOLD will appear in the top left of the screen. Press again to release.

5 To select a page whilst viewing a normal picture:

When in teletext mode, if a page selection is made and then the button is pressed, a normal picture will be displayed. The TV will indicate when the page is present by displaying the title bar of the text page at the top of the screen. Press the **TXT/TV** button to view the page.

To display news flashes:
To view news flashes as they are broadcast, select the news flash page for the particular teletext service (see the index page of teletext service). Press the button. The news flashes will be displayed as and when they are broadcast. Press the button to cancel the display. Note: It will not be possible to change programme position whilst in this mode, you will have to press the **TXT/TV** button to cancel the teletext first.

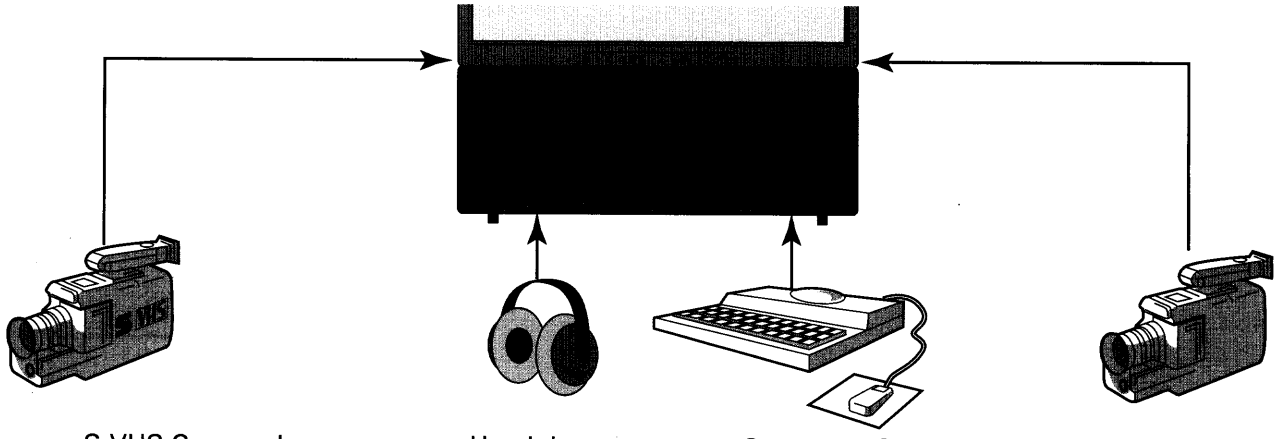
6 To reveal concealed text:

Some pages cover topics such as quizzes and jokes. To discover the solutions press the button.

Front and Back connections

If you connect monaural sound equipment to input 3, connect the audio output of the equipment to the L/Mono jack on the TV.

Front connections:



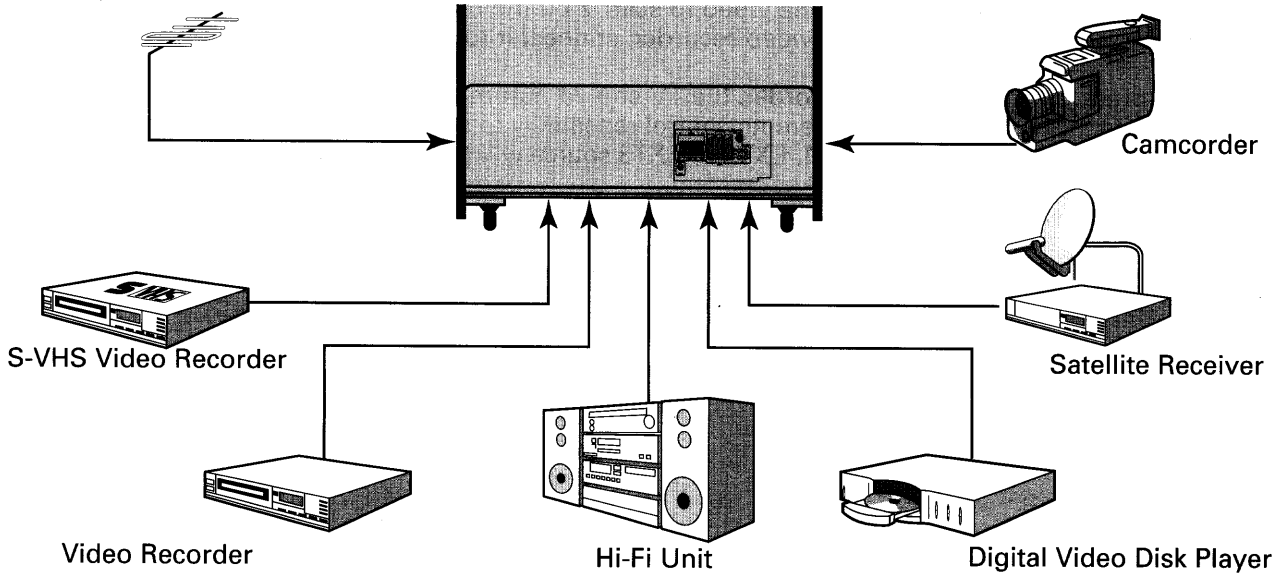
S-VHS Camcorder | Headphones | Computer Games | Camcorder

You are able to connect a wide variety of auxiliary equipment via the phono sockets located behind the flap on the front of the TV. For full details always refer to the owner's manual of the equipment to be connected.

Before connecting any external equipment, turn off all main power switches. If connecting any equipment using S-Video connectors please note that the S-Video jack accepts the separated luminance/chrominance (Y/C) signals.

Please note: Inserting the headphone jack will mute the sound from all speakers and deliver a normal stereo left and right signal. There are no DSP effects available when using headphones.

Back connections:

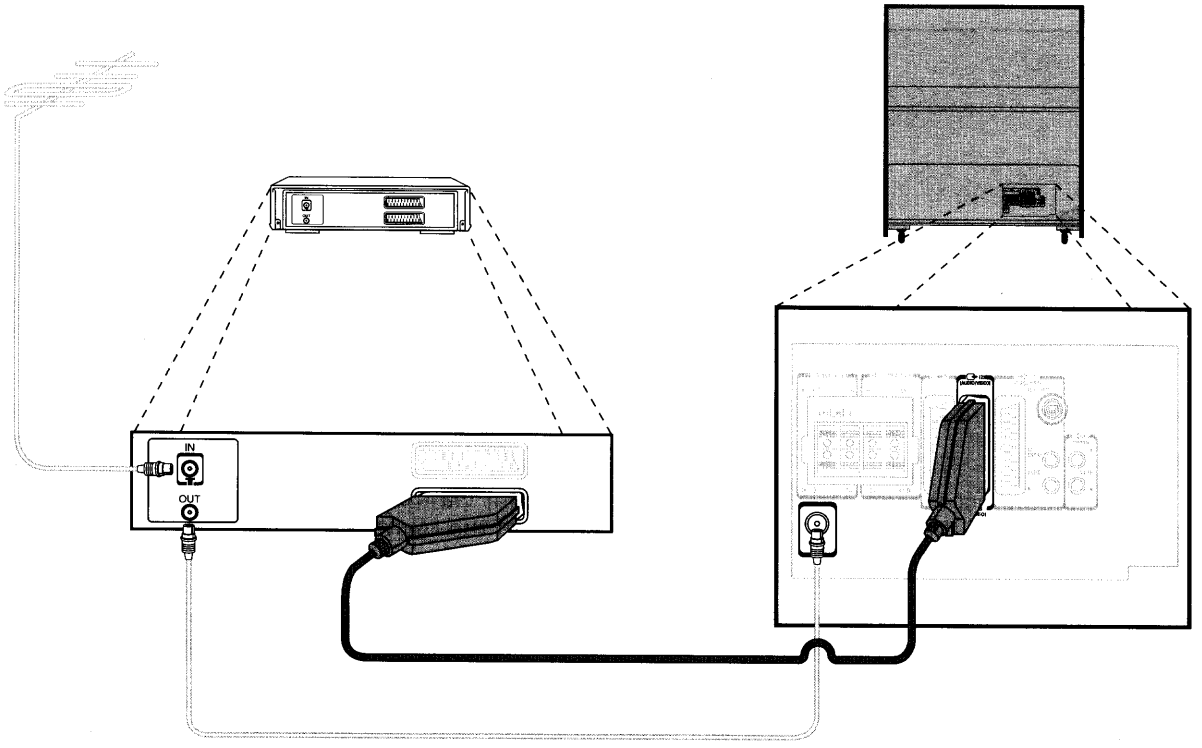


Camcorder | S-VHS Video Recorder | Satellite Receiver | Video Recorder | Hi-Fi Unit | Digital Video Disk Player

On the back of the TV are 3 scart sockets, a selection of phono sockets and a Super-video socket, all of which will enable you to connect a variety of auxiliary equipment. In addition there is a fixed external audio output which enables the connection of a suitable Hi-Fi unit.

Connecting a standard video recorder

Via a scart lead:



When connecting a normal (AV) video recorder we recommend that you connect it to scart 2.

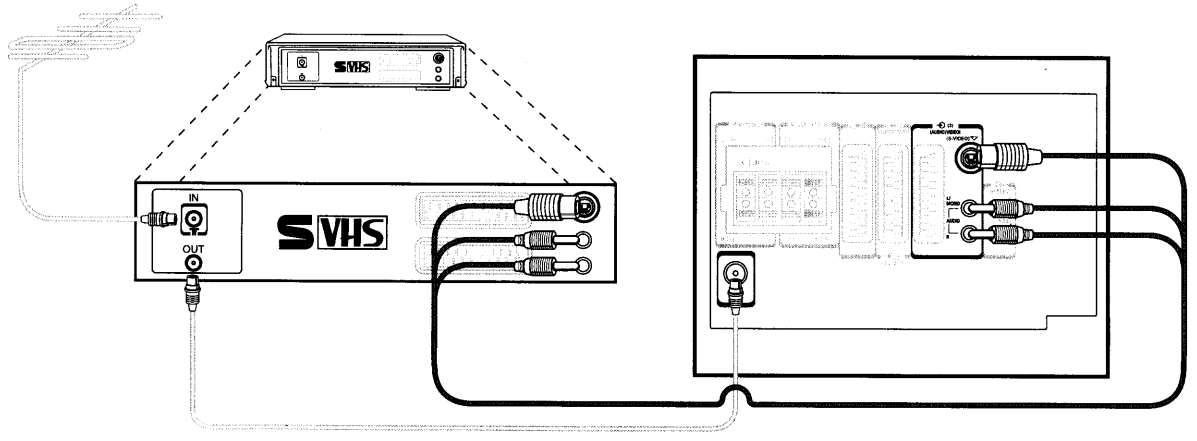
Connect the output scart terminal on the video to scart 2 on the rear of the TV using a full 21 pin scart lead. If you wish to connect a second video recorder, connect it to scart 1.

When you press play on the video recorder, the TV should automatically display the video signal. If it does not press the ⊖ button on the remote control repeatedly to select the appropriate source. Each time you press the button, the TV, EXT1, EXT2 or EXT3 source will be selected in order.

For further information see page 37 of this handbook.

Connecting a Super VHS video recorder

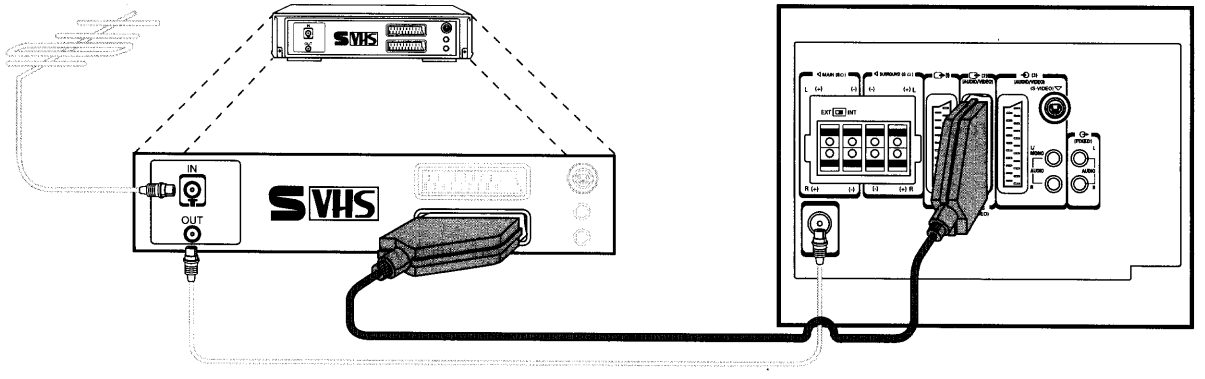
Via a super-video jack lead:



When the S-video cable is connected to the S-video-in jack, the video cable (phono-type) does not have to be connected. Connect the audio left and right from the video recorder to the audio left and right on the rear of the TV.

The S-video jack accepts separated luminance/chrominance (Y/C) signals. Ensure S-video is selected rather than AV as described on page 36 (EXT3S). Press the ⊖ button on the remote control repeatedly to select the appropriate source. Each time you press the button, the TV, EXT1, EXT2 or EXT3S source will be selected in order. For further information see page 37 of this handbook.

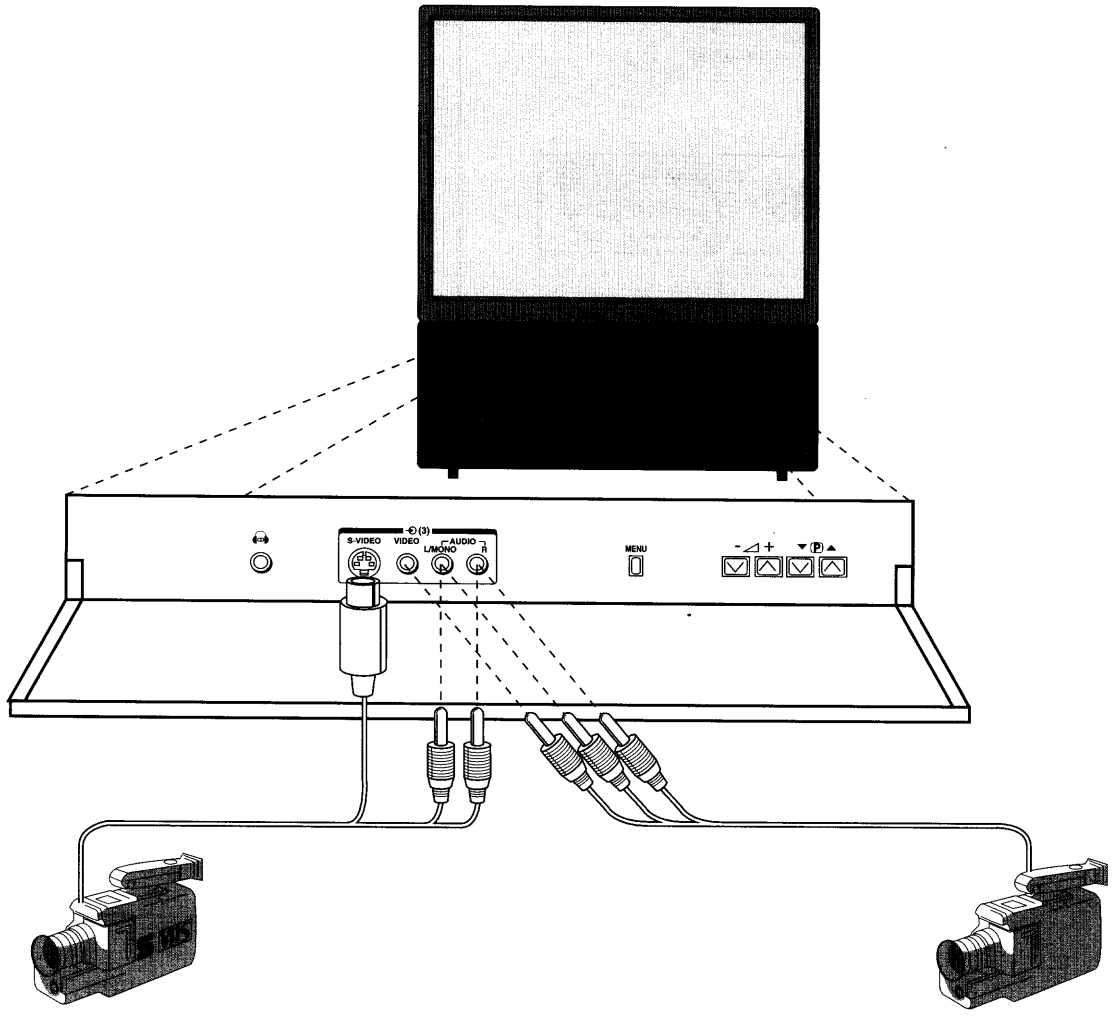
Via a scart lead:



Connect the output scart terminal on the video to scart 2 on the rear of the TV using a full 21 pin scart lead. If you wish to connect a second video recorder, connect it to scart 1.

Ensure that S-video is selected rather than AV as described on page 36 (EXT2S). When you press play on the video recorder, the TV should automatically display the video signal. If it does not press the ⊖ button on the remote control repeatedly to select the appropriate source. Each time you press the button, the TV, EXT1, EXT2S or EXT3 source will be selected in order. For further information see page 37 of this handbook.

Connecting a camcorder to the TV front



Super VHS Camcorder

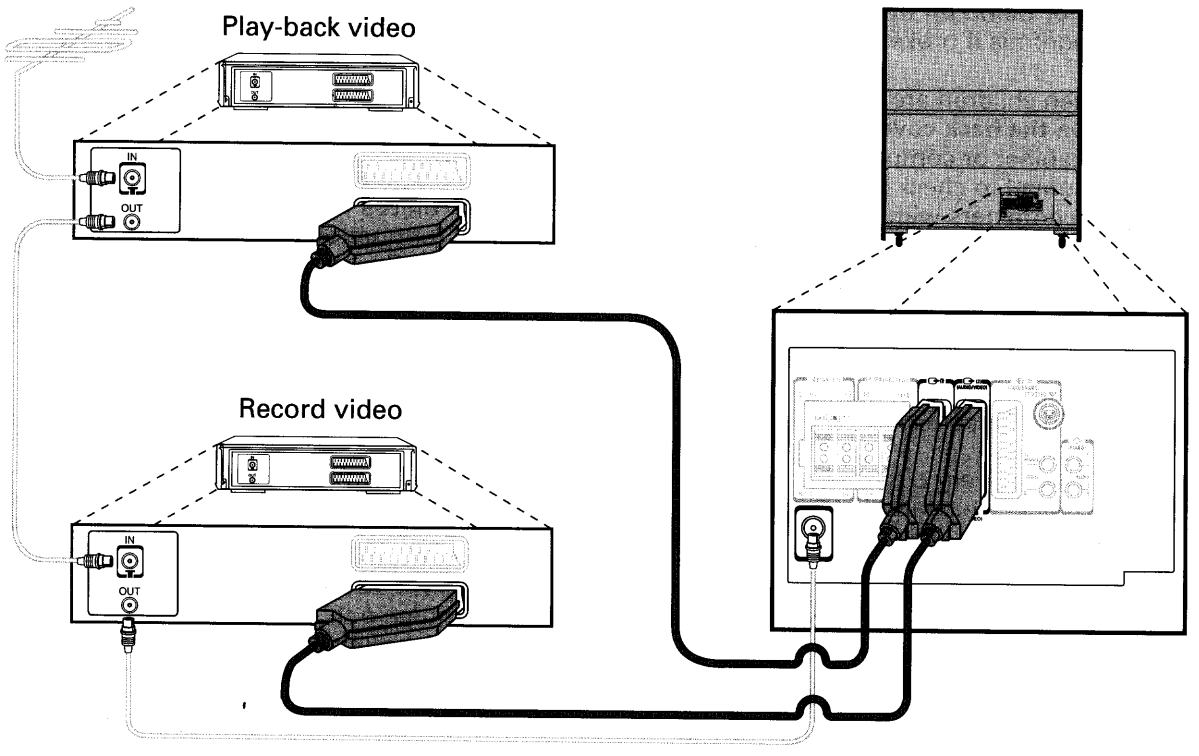
Camcorder

This connection allows you to play-back tapes in the camcorder and watch them on the TV. If you have a camcorder with a S-video jack, connect the S-video cable to the ⊖ 3 S-video input jack. If you have a standard camcorder, connect the video cable to the ⊖ 3 video phono input jack. With either video connection, you must connect the audio cables to hear the sound.

If using an S-video camcorder ensure the S-video is selected rather than AV as described on page 36 (EXT3S). Press the ⊖ button on the remote control repeatedly to select the EXT3S. Each time you press the button, the TV, EXT1, EXT2 or EXT3S source will be selected in order. For further information see page 37 of this handbook. When the S-video cable is connected to the S-video in jack, the video cable (phono-type) does not have to be connected.
The S-video jack accepts separated luminance/chrominance (Y/C) signals.

Copying from one video recorder to another

To copy from one video to another:



Connect the scart socket of the playback video to scart 1 on the rear of the TV.

Connect the scart socket of the record video to scart 2 on the rear of the TV.

Turn on the TV and both video recorders. N.B. The TV must be ON and not in standby.

Select the input signal for scart 2 as EXT1 (as described on page 36) set the recording video recorder to record mode and the playback video recorder to playback mode.

You can view the video signal from the playback video recorder on the TV screen whilst recording it.

CAUTION: The unauthorised recording of television programs, video tapes and other materials may infringe upon the provisions of the copyright laws.

For full details of the operation of your video recorders please refer to the respective handbooks.

When you press play on the video recorder, the TV should automatically display the video signal when connected by a full scart cable. If it does not press the ⊖ button on the remote control repeatedly to select the appropriate source. Each time you press the button, the TV, EXT1, EXT2 or EXT3 source will be selected in order. For further information see page 37 of this handbook.

For your guidance

SOME DO'S AND DON'TS ON THE SAFE USE OF EQUIPMENT. PLEASE READ THE FOLLOWING POINTS CAREFULLY. THEY ARE OF A GENERAL NATURE, INTENDED TO HELP YOU WITH ALL YOUR ELECTRONIC CONSUMER PRODUCTS. SOME ITEMS MAY NOT APPLY TO THE GOODS YOU HAVE JUST PURCHASED.

Safety tips:

Do not Stand or Climb on the TV
The TV is dangerous if broken or if it has fallen over.
Be careful when children are present.
Do not remove the back cover and never remodel the cabinet or components. Only allow qualified personnel to check and adjust your set.
Do not place containers with liquids, such as drinks, cosmetics, flowers etc. on the TV. If water or any foreign material get into the TV, remove the power cable immediately and contact your Toshiba dealer.
Keep magnets, toys with magnets, electric clocks, speakers etc., away from the TV.
When the cabinet becomes dirty, clean it with a soft, dry cloth.
When the cabinet is very dirty, use a damp cloth to wipe the cabinet clean and finish with a dry cloth.
Do not use solvents, such as Benzine, Thinners etc. to clean the TV. Such solvents may distort the cabinet or damage the finish. Do not allow rubber or vinyl products to remain in contact with the TV for any length of time as prolonged contact may result in staining
When cleaning the screen, turn the TV off and clean the screen using a soft, dry cloth.

This equipment has been designed and manufactured to meet international safety standards, but like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

DO read the operating instructions before you attempt to use the equipment.
DO ensure that all electrical connections, including the mains plug, extension leads and inter connections, between pieces of equipment, are properly made and in accordance with the manufacturers instructions. Switch off and withdraw the mains plug when making or changing connections.
Do leave at least 10 cm clearance around the top, sides and back of the TV to allow adequate ventilation and sound response.
DO be careful with glass panels or doors on equipment.

DON'T continue to operate the equipment if you are in any doubt about it working normally, or it is damaged in any way - switch off, withdraw the mains plug and consult your dealer.
DON'T remove any fixed cover as this may expose dangerous voltages.
DON'T leave equipment switched on when it is unattended, unless it is specifically stated that it is designed for unattended operation or has a standby mode. Switch off using the switch on the equipment and make sure your family know how to do this. Special arrangements may need to be made for infirm or handicapped people.
DON'T use equipment such as personal stereos or radios so that you are distracted from the requirements of traffic safety.
DON'T listen to headphones at high volume, as such use can permanently damage your hearing.
DON'T obstruct the ventilation of the equipment for example, with curtains or soft furnishings. Overheating will cause damage and shorten the life of the equipment.
DON'T use makeshift stands and NEVER fix legs with wood screws - to ensure complete safety always fit the manufacturer's approved stand with the fixings provided, according to the instructions.
DON'T allow electrical equipment to be exposed to rain or moisture. ABOVE ALL - NEVER let anyone, especially children, push anything into holes, slots or any other openings in the case - this could result in a fatal electric shock - NEVER guess or take chances with electrical equipment of any kind - it is better to be safe than sorry.
DON'T leave a stationary image on the TV screen, such as Teletext, computer displays etc, as they can become permanently ingrained on the screen.

For your guidance

Simple problem solving:

If your TV fails to operate correctly, we recommend that the following simple checks are carried out before contacting your local Toshiba dealer.

No Picture or Sound.
Check:
- mains switches are on, press ⏻. Plug into a known working mains socket.
- 'Timer off' facility has operated.

Poor or no Picture.
Try a different TV station, check your aerial and connections. Adjust fine tuning.

Coloured patches on screen.
Often caused by magnetic field interference. Turn off the TV for 10 minutes and then turn on again.

VCR or Satellite picture in Black and White.
Ensure the correct input socket is being used and that the socket is not set to S-Video. (see AV connections).

Distorted images/faded colours on screen.
Sometimes due to condensation if the room temperature rises rapidly or if the TV is moved from a cold room to a warm room. Leave set turned on for a while and this should restore the images.

Poor picture.
If the picture on the screen is distorted this can sometimes be improved by manually selecting the Colour System. In most circumstances the Auto Selection will give perfect results. However, manually selecting the system can bring improvements. (see Colour System Set-up for full details).

Blurred images.
If the images appear blurred, this can often be remedied by checking that the colours (red, green and blue) are correctly aligned. (see Convergence section for full details).

Good picture but no sound.
Press ◿+ or 🔇.

No sound heard from the external Left and Right speakers.
Check the the speaker switch has been set to EXT.

No Dolby Surround.
If you are unable to obtain surround sound effects from the rear speakers whilst playing a Dolby Surround video tape, check that the video recorder is a stereo unit and that the direct left and right audio signals are input to the TV by means of one of the 21-pin Scart sockets.

If you connect external front left and right speakers, you must set the External speaker switch to EXT to get the full benefit of Dolby Pro Logic – if the switch is left on INT the external speakers will not function.

Turn the television off before changing the position of the switch. When the switch is set to EXT, this will enable the TV's speakers to carry the centre sound channel.

Remote Control does not work.
Check the batteries.

If you have problems with teletext.
Good performance of text depends on a good strong broadcast signal. This normally requires a roof or loft aerial. If the text is unreadable or garbled, check your aerial.

Go to the main index page of the teletext service and look for the User Guide. This will explain the basic operation of teletext in some detail.

If you need further information on how to use text (see the Teletext section).

Specifications, Accessories

Specifications:

Receiving system/channels	CCIR (L-SECAM) TV Broadcast standard UHF: 21-69 VHF: B-C, 1-6, B-Q, 71-86 CCIR (B/G-PAL) (B/G-SECAM) TV Broadcast standard UHF: 21-69 VHF: 2-4, 5-12, S1-S20, S1-S41 CCIR (I-PAL) TV Broadcast standard UHF: 21-69 CCIR (D/K - SECAM) TV Broadcast standard R1-R12, R21-R69
Programme Positions	100
Standby Power consumption	7 watts
Power consumption	240 watts
Stereo	Dolby Pro Logic, Nicam, MPX
Video Input	PAL, PAL 60 Hz. (Video disk playback) NTSC 3.58/4.43 MHz./50Hz. NTSC (VTR playback)
Input/Output	Scart -1 (Full -21 pin) RGB, AV
Input/Output	Scart-2 (21 pin) AV, S-video
Input/Output	Scart-3 (21 pin) AV, S-video, 4 pin S-video, RCA jack
Front input	Input 3 (4 pin S-video, RCA jack) (Note: Front and Rear Input 3 are common)
Visible Screen Size	1220mm (48")
Sound output (at 10% distortion)	Main: 14W + 14W rms Centre: 10W + 10W Surround: 10W + 10W
Dimensions	1188mm (W) 1354 mm (H) 570 mm (D)
Weight	48" 92Kg (approx.) 55" 100Kg (approx)
Headphone Socket	3.5 mm Stereo

Accessories

1 Remote control
2 (R6 or AA) batteries
2 Surround speakers

Optional extras:

Cabinet stand
External front speakers
Surround speaker stand

© Toshiba Consumer Products (UK) Ltd
All rights reserved.
Reproduction in whole or part without written permission is strictly prohibited.

* Manufactured under license from Dolby Laboratories Licensing Corporation. DOLBY, the double-D symbol ⧈ and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

Toshiba Consumer Products Ltd
Northolt Avenue, Ernesettle, Plymouth PL2 5TS
Specification is subject to change without notice.

Originated by Kensa Illustration & Design, Saltash, Cornwall.
Printed by Penwell Ltd., Callington, Cornwall.

2356 2823